

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney

A United Technologies Company

December 12, 2001

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement & Remediation Division
79 Elm Street
Hartford, CT 06106-5127

Pratt & Whitney
CTD99067208V
R-9
RDMS# 100506

Attn: Richard C. Hathaway, Jr., L.E.P.



RDMS DocID 00100506

RE: CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001

Dear Mr. Hathaway:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statutes and any other applicable law.

Sincerely,

UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION

Lorin Sodell
Chief Manufacturing Engineer
Director, Facilities & Services

Attachment

cc: Lauren Levine, UTC
Brian Cutler, LEA
Juan Perez, EPA



Loureiro Engineering Associates, Inc.

December 12, 2001

**State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement and Remediation Bureau
79 Elm Street
Hartford, CT 06016-5127**

Attn: Richard C. Hathaway, Jr., L.E.P.

**RE: CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Dear Mr. Hathaway:

In accordance with Paragraph B.2 of the above referenced Consent order, attached please find the progress report for the period from October 2001 through December 2001. This progress report includes a summary of those actions completed at the site as defined in Paragraph A.2 of SRD-130. In accordance with Paragraph B.8 of the above referenced Consent order, I hereby certify that:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statutes and any other applicable law.

If you should have any questions or comments, please contact me or Lauren Levine of United Technologies Corporation at (860) 728-6520.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Brian A. Cutler, P.E., L.E.P.
Vice President

Attachment

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UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
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1. DESCRIPTION OF ACTIVITIES

In accordance with Paragraph B.2 of the above referenced Consent Order, this progress report has been prepared to summarize those activities that have been completed during the period from September 24, 2001 through December 2001. As appropriate, this progress report also includes tables, figures, and drawings to support the following text. The description of activities is presented below in the same manner as presented in the Remedial Action Work Plan for the project.

1.1 Pre-construction activities

Prior to the initiation of construction activities, two categories of activities were to be completed, which consisted of Project Permits and Approvals and Engineering Design. A brief description of the activities completed is presented below.

1.1.1 Project Permits and Approvals

As described in the September Progress Report, a Temporary/Emergency Authorization to discharge dewatering wastewater to surface water was signed by the Commissioner of the DEP on September 6, 2001. This Temporary/Emergency Authorization allowed for the discharge of up to 1,008,000 gallons of dewatering wastewater to Willow Brook. The Temporary/Emergency Authorization was filed subsequent to the determination that the dewatering wastewater would exceed the previous estimate of 50,000 gallons as stated in the Groundwater Remediation Wastewater General Permit.

During the current reporting period, modification to the Temporary/Emergency Discharge Authorization was requested and has been received. On October 4, 2001, a request was submitted to Donald Gonyea of the DEP for modification to Emergency Authorization EA0100183 to allow for the discharge of pretreated excavation dewatering, and gravity sediment dewatering wastewater to the Connecticut River via the UTC/P&W Colt Street wastewater treatment facility (NPDES Permit Number CT-0001376). The modification request was the result of the presence of zinc in groundwater at concentrations much higher than had been previously identified. The presence of zinc in groundwater has been attributed to the naturally occurring presence of acidic pore water (pH in the range of 4.9 to 5.2 s.u.) in the pond bottom sediments that acts to mobilize zinc. Under normal conditions, when the pond is full, groundwater monitoring wells around the periphery of Willow Brook and Willow Brook Pond have exhibited a pH in the range of 6.2 to 7.2 s.u. and zinc concentrations in the range of 0.02 mg/l.

The Commissioner of the DEP granted the modification to the Temporary/Emergency Discharge Authorization on October 12, 2001. In accordance with the above referenced modified emergency authorization, a Process and Instrumentation diagram along with a narrative description of the proposed groundwater treatment system associated with the wetlands

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dewatering system, which will discharge directly into Willow Brook, was submitted to the DEP on November 30, 2001. Correspondences related to the Temporary/Emergency Discharge Authorization that were generated during this reporting period are provided as Attachment No. 1.

1.1.2 Engineering and Design

Prior to implementation of the construction phase of the project, it was necessary to prepare a detailed set of construction drawings to guide the implementation of the project. The project is being performed as a design-build effort. As such, detailed design plans and specifications beyond that necessary to support the permitting efforts and to establish the performance criteria for the remediation project, are not necessary. The drawings and figures contained within the Remedial Action Work Plan, Revised October 2001, represent the current status of engineering design for the project. Additional engineering design, other than the anticipated minor field alterations necessitated by changed conditions, was not anticipated. During this reporting period, there were minor changes, due to the increased size of the excavations from the initial estimated area. However, the restoration of the site to the conditions and topography as existed prior to remediation is anticipated to remain the same.

1.2 Construction Activities

Construction activities were initiated at the site on July 2, 2001. The following is a summary of the construction activities completed during this reporting period. A Site Plan depicting remediation areas discussed in the following parts of this Section is provided as Attachment No. 2.

1.2.1 Site Preparation

During this reporting period, the only site preparation that occurred consisted of the installation of a temporary fence, the removal of trees around the oil/water separator and the clearing and grubbing of the wetlands.

Temporary Fence: A temporary fence was installed on both sides of temporary dewatering system piping in the waste treatment area on October 10, 2001. The temporary piping was installed to facilitate the delivery of groundwater from Willow Pond to a dilute wastewater sump located within the main manufacturing facility. The wastewater is pumped from the dilute wastewater sump to the Colt Street wastewater treatment plant.

Clearing and Grubbing: Clearing and grubbing activities were performed in the oil/water separator area (Area 04) on October 2, 3, and 31 2001 and December 5, 2001. The clearing and grubbing activities involved the felling of trees in the northwest portion of this excavation to allow for the removal of contaminated soil outside the original limits of proposed excavation. On October 3, 2001, trees in this area were cut in order to extend the excavation further north. On October 31, one tree was cut on the northwest bank of the oil/water separator area. On

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December 5, 2001, two trees in the north central portion of the final excavation area were removed. This removal completed all planned clearing and grubbing activities in the oil/water separator area and no additional clearing or excavation is necessary.

1.2.2 Demolition and Removal of Existing Structures

Oil/Water Separator: As detailed in the Remedial Action Work Plan, the oil/water separator, located between the upper and lower sections of Willow Brook Pond was to be removed and disposed offsite. The excavation and removal of the oil/water separator was initiated during the last reporting period, on August 13, 2001. The removal of the oil/water separator was completed on November 3, 2001. The activities related to the removal of contaminated soil and sediment in this area are detailed in the following section.

1.2.3 Contaminated Soil and Sediment Excavation and Offsite Disposal

Oil/Water Separator (Remediation Area 04): As detailed above, contaminated soil and sediment excavation was initiated during the last reporting period, on August 13, 2001, in the vicinity of the former oil/water separator. During this reporting period, an additional 10,940 cubic yards (11,610 tons) of contaminated soil and concrete was excavated and removed from the site. Approximately 2,257 cubic yards of this soil contained less than 50ppm total PCBs, while the remainder (8,683 cubic yards) contained greater than 50ppm total PCBs.

Confirmatory sampling and field (immunoassay) screening techniques were conducted throughout the excavation activities. The results of field screening resulted in the determination that contaminated soil in the vicinity of the former oil/water separator extended laterally and vertically beyond the limits initially delineated. The analytical data for the final confirmatory sampling performed in this area is provided in Attachment No. 3. Based on field observations, screening data, and fixed laboratory confirmatory sampling results, it was also apparent that contamination in the vicinity of the oil/water separator also extended laterally into the eastern limits of the lower portion of Willow Brook Pond (Remediation Area 05). As a matter of logistical convenience, the excavation of the contaminated soil and sediment was extended to result in the partial removal of the contaminated soil and sediment in Remediation Area 05.

Following receipt of confirmatory data indicating that the remediation goal of less than 25 ppm PCBs was achieved, on November 7, 2001, backfilling of the oil/water separator location (Remediation Area 04) was initiated. It is anticipated that restoration of this area will be completed during the next reporting period.

Upper Pond (Remediation Areas 01 through 03): During the last reporting period, it was determined that the amount of dewatering wastewater generated during the site activities would be significantly greater than initially anticipated. Also, during the installation of the well points during the last reporting period, it was determined that a zone of previously unidentified contamination at depths ranging from 4 to 6 feet below the existing pond bottom may be present.

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In response to this, a decision was made to extend the by-pass channel around the upper section of Willow Brook Pond to the 108-inch diameter inlet culvert. As previously reported, the by-pass channel was completed on September 20, 2001.

Dewatering within the upper pond was initiated on October 12, 2001 in conjunction with the approval to the modification to the temporary/emergency authorization. Dewatering was continued during the period of excavation and restoration of the upper portion of Willow Brook Pond.

Dewatering of the upper portion of Willow Brook Pond was adequate for the purposes of initiating excavation on October 18, 2001. During this reporting period, 6,160 cubic yards (7,400 tons) of contaminated soil and sediment was excavated and removed from the site. Approximately 2,660 cubic yards of this soil contained less than 50ppm total PCBs, while the remainder (3,500 cubic yards) contained greater than 50ppm total PCBs.

The initial planned excavation for the upper portion of Willow Brook Pond was 260 cubic yards. As noted previously, during the installation of the well-point dewatering system within the limits of the upper section of Willow Brook Pond, it was determined that a zone of previously unidentified contamination at depths ranging from 4 to 6 feet below the existing pond bottom may be present. Soil borings discussed in the previous progress report confirmed the presence of this layer of contamination and resulted in the conclusion that the entirety of the upper section of Willow Brook Pond needed to be excavated and removed.

Based on observations of several test pits, field immunoassay testing and performance of confirmatory soil sampling obtained during the verification sampling performed within the upper section of Willow Brook Pond, it was also determined that the lateral limits of soils exhibiting total PCB concentrations in excess of 25 ppm extended beyond the project boundaries as defined in the Consent Order. A decision was made to excavate contaminated soils along the northern boundary of the upper section of Willow Brook Pond. This decision was based on the rationale that the performance of remediation of this portion of the site at a future date would be logistically much more difficult than performing the remediation at this time. In addition, a decision was made to assess the southerly lateral limit of contamination, as again, the performance of remediation at this time was logistically simpler. However, excavation to the southern direction was limited by the presence of the diversion channel and concerns regarding the stability of the slope separating the excavation and the diversion channel. The excavation of the pond bottom was completed on October 26, 2001. Completion of excavation in the south embankment was completed to a point at which slope stability became a concern on November 8, 2001. Excavation of the north embankment was completed on December 3, 2001.

Based on the confirmatory sample analytical data, additional excavation is necessary in the northeastern portion of the upper section of Willow Brook Pond to complete the remediation of this area. This remediation will be performed in conjunction with the excavation of Remediation

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Area 01. As these areas are located in close proximity to the diversion channel, the excavation will not be performed until the diversion channel is backfilled.

It should be noted, all excavation performed beyond the lateral limits of the pond bottom caps is being performed to achieve compliance with the remediation standard regulation. All soils within 4 feet of the ground surface are being remediated to comply with the Residential Direct Exposure Criteria and all soils greater than 4 feet and to a depth of 15 feet are being remediated to comply with the Commercial Industrial Direct Exposure Criteria. The analytical data for the final confirmatory samples are provided in Attachment No. 3.

Backfilling and cap construction and restoration activities associated with the Upper Pond area were initiated on November 15, 2001. It is anticipated that restoration of this area will be completed within the next reporting period.

Lower Pond (Remediation Areas 05 through 11): No excavation has been completed within the lower section of Willow Brook Pond with the exception of the previously discussed partial remediation of Remediation Area 05.

Stream Channel and Wetlands (Remediation Areas 12 through 15): No excavation within the wetlands or stream channel areas has been completed.

1.2.4 Construction Dewatering

Dewatering of nearly all remediation areas was determined necessary to allow for the removal of soil and sediment containing PCBs at concentrations greater than 25 ppm. The installation of the well point dewatering system in the upper section of Willow Brook Pond was completed during the last reporting period. During this reporting period, the Temporary/Emergency Authorization was revised to contain provisions to allow for the discharge of an adequate volume of wastewater to allow for the completion of the excavation and to allow for the discharge of groundwater containing zinc via the Colt Street wastewater treatment plant. Information pertaining to the Temporary/Emergency Authorization has been detailed in Section 1.1, Project Permits and Approvals.

Dewatering activities during this reporting period included the installation of dewatering facilities within the oil/water separator area, the lower pond and the stream channel/wetland area. Details associated with these activities are presented below.

Oil/Water Separator & Upper Pond (Remediation Areas 01 through 04): The oil/water separator area was initially excavated to the groundwater table (approximately elevation 20.0). To facilitate the deeper remedial excavation activities within this area, a dewatering system was installed within the excavation. This system was designed to be operated collectively with the upper pond dewatering system. Based on initial laboratory screening from these associated well point systems, zinc was detected at concentrations greater than the permitted limits for discharge

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directly to Willow Brook. As such, provisions were made to pump this dewatering wastewater to the Pratt & Whitney Colt Street Wastewater Treatment System.

On October 8, 2001, a 6-inch discharge hose was installed through a 48-inch storm drain from the subject area to the Pratt & Whitney dilute wastewater sump in the main plant. This dilute wastewater sump is equipped with a pump station, which is connected to the Colt Street wastewater treatment plant via a force main. The connection of the dewatering system to the dewatering sump was completed by October 11, 2001. The two-pump system serving the upper pond and oil/water separator areas was started on October 12, 2001, and, after initial testing, was set to run at approximately 100 gallons per minute (gpm).

An exceedance of the applicable pollutant limits as defined in the Temporary/Emergency Discharge Authorization was encountered during the compliance monitoring performed on November 2, 2001. The Temporary/Emergency Discharge Authorization authorizes discharge to the Pratt & Whitney, Colt Street treatment system approved through NPDES Permit No. CT0001376 or directly to Willow Brook. The discharge during this sampling event was directed through the Colt Street treatment facility. The discharge at the Colt Street wastewater treatment plant remained in compliance during this period. Additionally, all appropriate notifications associated with the requirements of the Emergency/Temporary Authorization for the dewatering wastewater discharge were made. The associated sampling was performed on November 2, 2001 and the analytical data was received November 9, 2001. Exceedances were encountered for total volatile organic compounds (VOCs) and total PCBs. Dewatering in the area represented by this particular sampling event (referred to as upper Willow Brook Pond) was terminated November 7, 2001 at approximately 5:00 p.m. Future dewatering within this particular area, if necessary, will be performed with the use of a treatment system specifically designed to effectively remove the constituents of concern.

The initial screening data for the upper pond and oil/water separator areas is presented in Table 1 in Attachment No. 4. Permit compliance monitoring data for the upper pond and oil/water separator system is presented as Table 2 in Attachment No. 4.

Lower Pond (Remediation Areas 05 through 11): On October 22, 2001, the installation of well points associated with the dewatering system for this area was initiated. Installation of the header, connective piping and hoses and the dewatering pretreatment system were completed on November 19, 2001. Due to the presence of zinc and VOCs in the raw water screening analysis at concentrations exceeding authorization limits for discharge to Willow Brook, dewatering wastewaters generated from this area of the project site are being pretreated for removal of VOCs and the pretreated effluent is being directed to the Colt Street treatment facility for removal of zinc.

Discharge from this dewatering system was initiated on November 21, 2001 with discharge into an on-site fractionalization tank, but was terminated due to heavy silt observed in the influent.

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On November 23, 2001 a settling tank was installed to settle the silt out prior to discharge through the bag filtration system. Discharge from the system was reinitiated November 26, 2001. Discharge monitoring has been completed in accordance with the DEP issued Emergency/Temporary Authorization.

The initial screening data for the lower pond dewatering system is presented in Table 1 in Attachment No. 5. Prior to initiating discharge to the Colt Street facility, the treated wastewater was pumped into a fractionalization tank to facilitate laboratory screening for VOCs to evaluate the performance of the treatment system. The related performance data is presented in Table 2 in Attachment No. 5. Permit compliance monitoring data for the dewatering system is presented in Table 3 in Attachment No. 5.

Stream Channel and Wetlands (Remediation Areas 12 through 15): On November 10, 2001, clearing and grubbing of the wetlands area was initiated. Dewatering well points and the related collection header were installed throughout this area between November 13 and November 19, 2001. Due to the presence of VOCs in the raw water screening analysis at concentrations exceeding authorization limits for discharge to Willow Brook, dewatering wastewaters generated from this area of the project site are being pretreated for removal of VOCs prior to discharge to the Willow Brook. A separate VOC removal system was installed on November 24, 2001 in accordance with the specifications submitted to the DEP (refer to Section 1.1.1). This system is operated separately from the lower pond treatment system, as the two systems are remote in relation to one another and the discharge from the stream channel and wetlands system is being directed to Willow Brook rather than the Colt Street wastewater treatment plant.

The initial screening data for the wetland dewatering system is presented in Table 1 in Attachment No. 6. Prior to initiating discharge to Willow Brook, the treated wastewater was pumped into a fractionalization tank to facilitate laboratory screening for VOCs to evaluate the *performance of the treatment system*. The related performance data is presented in Table 2 in Attachment No. 6. As of the date of this progress report, no compliance monitoring data has been received for the discharge from this system.

1.2.5 Disposal Characterization Sampling

A total of 37 disposal characterization samples were collected analyzed during this reporting period. Of the 37 samples, 6 were chip samples of concrete materials, 15 were wipe samples of non-porous materials (i.e. steel), and 16 were samples of soil and sediment. The soil and sediment samples were collected insitu from areas outside of the original limits of proposed excavation as a means to establish disposal requirements for these materials.

Analytical data associated with the disposal characterization samples are discussed in Section 2 and are presented as Attachment No. 7.

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1.2.6 Confirmatory Sampling

A total of 198 confirmatory soil samples (121 composite samples and 77 grab samples) were collected from the upper section of Willow Brook Pond, the oil/water separator area, and the eastern most portion of the lower section of Willow Brook Pond during this reporting period. The confirmatory samples were collected and analyzed in accordance with the Remedial Action Work Plan. Analytical data associated with the confirmatory samples are discussed in Section 2 and are presented as Attachment No. 3.

2. DATA PRESENTATION

In previous sections of this progress report, mention has been made to the collection and analysis of a variety of samples. This section presents a summary of the analytical data received during this reporting period. The section is formatted to present the analytical data in the order in which it is provided in the attachments.

Attachment No. 3 Confirmatory Soil Sampling Analytical Data: During the period from October 26 to December 5, 2001 numerous confirmatory soil samples were obtained from throughout the remedial excavation surfaces within the upper pond, oil/water separator and eastern end of the lower pond to document the adequacy of the excavation limits. Drawings 1 and 2 in Attachment No. 3 present the final excavation limits and the respective bottom of excavation confirmatory sample locations for these upper pond and oil/water separator areas. Drawings 3 and 4 present the final excavation sidewall confirmatory sample locations for the upper pond and oil/water separator areas.

In accordance with the RAWP, both grab and composite confirmatory sampling was performed throughout the remediation process. Grab sampling is intended to demonstrate compliance with the State of Connecticut Remediation Standard Regulation for PCBs and other constituents of concern, which includes metals, VOCs, SVOCs, TPH and cyanide. Composite sampling is intended to demonstrate compliance with the remedial objective of 25 ug/kg PCBs within the areas designated for capping.

For ease in assessing this data, the composite analytical data is presented separately from the grab sample data. A summary of the sampling and analytical information for the final confirmatory soil grab samples is provided as Table 1 in Attachment No. 3 and a summary of the constituents detected is presented as Table 2. A summary of the sampling and analytical information for the final confirmatory soil composite samples is provided as Table 3 in Attachment No. 3 and a summary of the constituents detected is presented as Table 4.

In some cases, the confirmatory soil samples obtained for compliance demonstration exceeded the applicable criteria. Most of these areas were re-excavated and resampled. The data associated with these re-excavated areas is not included in the above referenced data sets as the representative soil has been excavated and disposed of at an off-site facility. In some specific

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areas located around the upper pond, excavation of the sidewall exceedances was not logistically or safely possible due to embankment stability limitations. The limits of excavation completed to date are, however at or beyond the limits defined for this project in the RAWP. The exceedances will be remediated at a future time as a separate project or as a continuation of this project where practical. As such, the data set in Attachment No. 3 is the final data set for this particular progress report, but will likely be revised once the areas exhibiting exceedances are revisited.

Attachment No. 4 Oil/Water Separator and Upper Pond Dewatering Wastewater Analytical Data: Four raw groundwater samples were collected on September 11, 2001 from the onsite fractionalization tanks to assess treatment needs for the discharge of groundwater from the upper pond area at the site (refer to September Progress Report). Additional samples were obtained from the well point system serving the oil/water separator on September 26, 2001. The samples were analyzed for the presence of PCBs, volatile organic compounds, total suspended solids, total dissolved solids, and total copper, lead and/or zinc. A summary of the raw water analytical information is provided as Table 1 in Attachment No. 4.

The analytical data were compared to the effluent limitations in the Emergency/Temporary Authorization to discharge dewatering wastewater to the surface water. Based on the analytical data for raw water samples, treatment was necessary to accomplish the removal of zinc from groundwater prior to discharge to the surface water.

As such, the dewatering facilities for the oil/water separator and the upper pond were interconnected and discharged to the Pratt & Whitney Colt Street wastewater treatment plant. In accordance with the Emergency/Temporary Authorization, this discharge is monitored on a weekly basis. Samples are analyzed for VOCs and PCBs. Analysis for zinc was also performed to assess if the discharge could be routed directly to Willow Brook. A summary of the compliance analytical information is provided as Table 2 in Attachment No. 4.

Attachment No. 5 Lower Pond Dewatering Wastewater Analytical Data: A raw groundwater sample was collected on November 8, 2001 from the onsite fractionalization tank to assess treatment needs for the discharge of groundwater from the lower pond area at the site. The sample was analyzed for the presence of PCBs, volatile organic compounds, total suspended solids, total dissolved solids, total copper, lead and/or zinc. A summary of the raw water analytical information is provided as Table 1 in Attachment No. 5.

The analytical data were compared to the effluent limitations in the Emergency/Temporary Authorization to discharge dewatering wastewater to the surface water. Based on the analytical data for raw water samples, treatment was necessary to accomplish the removal of VOCs and zinc from groundwater prior to discharge to the surface water. As such, a treatment system was erected at the site to provide settling, filtration and air stripping processes. Since this system is

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primarily aimed at the removal of VOCs and suspended solids, discharge from this system is directed to the Colt Street facility for removal of the zinc.

The effectiveness of the treatment system was evaluated prior to discharge to Colt Street by scanning the influent and effluent samples, while directing the discharge into an on-site fractionalization tank. Complete removal of the VOCs was realized. A summary of the influent and effluent performance analytical information is provided as Table 2 in Attachment No. 5.

In accordance with the Emergency/Temporary Authorization, this discharge is monitored on a weekly basis. Samples are analyzed for VOCs and PCBs. Analysis for zinc is also performed to assess if the discharge could be routed directly to Willow Brook. To date, the concentration of zinc in the effluent from the dewatering system is still in excess of the Temporary/Emergency Authorization limits. A summary of the compliance analytical information is provided as Table 3 in Attachment No. 4.

Attachment No. 6 Wetland Dewatering Wastewater Analytical Data: A raw groundwater sample was collected on November 15, 2001 from the onsite fractionalization tank to assess treatment needs for the discharge of groundwater from the wetland area at the site. The sample was analyzed for the presence of PCBs, volatile organic compounds, total suspended solids, total dissolved solids, and total copper, lead and/or zinc. A summary of the raw water analytical information is provided as Table 1 in Attachment No. 6.

The analytical data were compared to the effluent limitations in the Emergency/Temporary Authorization to discharge dewatering wastewater to the surface water. Based on the analytical data for raw water samples, treatment was necessary to accomplish the removal of VOCs from groundwater prior to discharge to Willow Brook. As such, a treatment system was erected at the site to provide settling, filtration and air stripping processes.

The effectiveness of the treatment system was evaluated prior to discharge to Willow Brook by scanning the influent and effluent samples, while directing the discharge into an on-site fractionalization tank. Complete removal of VOCs was realized. A summary of the influent and effluent performance analytical information is provided as Table 2 in Attachment No. 6.

In accordance with the Emergency/Temporary Authorization, this discharge is monitored on a weekly basis. Samples are analyzed for VOCs, PCBs, and total copper, lead and zinc. A summary of the compliance analytical information is provided as Table 3 in Attachment No. 6.

Attachment No. 7 Disposal Characterization Sampling Analytical Data: A summary of disposal characterization samples collected during this reporting period is provided as Table 1 in Attachment No. 7. A summary of the constituents detected in composite samples is provided as Table 2 in Attachment No. 7.

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Of the 6 concrete chip samples collected, 3 were for the purposes of determining disposal requirements and 3 were for the purposes of assessing concentrations of PCBs in concrete that was to remain in place following remediation. Concentrations of PCBs in these 6 samples ranged from 23 µg/kg to 37 µg/kg. No additional decontamination of concrete to be left in place is necessary and concrete disposed off the site was shipped with the waste stream containing less than 50 ppm total PCBs.

All 15 wipe samples were collected for the purposes of establishing disposal requirements for non-porous media (i.e. steel). The concentrations in wipe samples range from 0.740 µg/100 cm² to 76 µg/100 cm². As concentrations were detected in excess of the 10 µg/100 cm² cleanup standard for non-restricted use of non-porous surfaces, these materials were also disposed of off the site with the waste stream containing less than 50 ppm total PCBs 25.

The 16 soil samples were collected from within Remediation Areas 02, 03, and 04. The samples were analyzed for PCBs for the purposes of verifying disposal requirements for the materials. The analytical data for these samples indicate the presence at concentrations ranging from 0.330 mg/kg to 160 mg/kg total PCBs.

3. COMMENTS TO REMEDIAL ACTION WORK PLAN

A November 13, 2001 memorandum was received which presented the Environmental Protection Agency's comments to the *Remedial Action Work Plan, Revised October 2001*. Responses to each of the comments and minor revisions to the Remedial Action Work Plan will be completed by December 17, 2001. The revisions will result in the re-issuance of select pages and tables contained within the Remedial Action Work Plan and do not necessitate the republication of the entire document.

4. PLANNED ACTIVITIES

In the previous progress report, it was indicated that planned activities for this reporting period were to include all those necessary to complete the excavation and offsite disposal of contaminated soil and sediment within the limits of the site and to construct the various engineered controls within and immediately surrounding Willow Brook and Willow Brook Pond. As a result of unforeseen conditions and expansion of the project scope, the construction activities, site restoration and the establishment of vegetation are anticipated to continue through June 2002. As a result of the extension of the overall construction period, the completion dates for post-remediation reports and Environmental Land Use Restrictions have also been extended to November 2002.

It is currently estimated that upon completion, approximately 31,600 cubic yards of contaminated soil and sediment will have been excavated and disposed of off the site. An increase of over 150 percent from the approximate 12,500 cubic yard estimate. The additional volume of contaminated soil results from two factors. First, greater than anticipated lateral and

CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001

vertical extent of contamination in planned remediation areas has resulted in a significant expansion of excavation necessary to achieve remediation goals. Second, the decision to complete excavation beyond the limits required in Consent Order SRD-130 in select areas of the site where, due to physical constraints, the performance of future remediation would not be cost-effective or prudent.

Provided as Attachment No. 8 is a copy of a notification submitted to DEP requesting approval of an extension of the overall project schedule. It should be noted that the schedule in Attachment No. 8 contains assumptions including the ability to continue to work through the winter and that there are no increases in the overall project scope going forward. Should these assumptions prove incorrect, the overall impact to the project schedule will be evaluated and a subsequent modification, if necessary, will be submitted.

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 1

**Correspondence
Related to Modification to Temporary/Emergency Authorization
For
Discharge of Dewatering Wastewater**



Loureiro Engineering Associates, Inc.

October 4, 2001

**State of Connecticut
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127**

Attn: Donald J. Gonyea

**RE: Willow Brook/Willow Brook Pond Remediation Project
Request for Modification Emergency Discharge Authorization
Authorization Number EA0100183**

Dear Mr. Gonyea:

On behalf of our client, United Technologies Corporation, Pratt & Whitney Division (UTC/P&W), we herein request a modification to the Emergency Authorization EA0100183 to allow for the discharge of pretreated Willow Pond dewatering, excavation dewatering, and gravity sediment dewatering wastewater directly to the Connecticut River via the UTC/P&W Colt Street wastewater treatment facility (NPDES Permit Number CT-0001376). As discussed, this modification request results from the presence of zinc in groundwater at concentrations much higher than had been previously identified. The presence of zinc is currently attributed to the naturally occurring presence of acidic pore water (pH in the range of 4.9 to 5.2 s.u.) in the pond bottom sediments that is acting to mobilize zinc. Under normal conditions the pond is full groundwater monitoring wells around the periphery of Willow Brook and Willow Brook Pond, have exhibited a pH in the range of 6.2 to 7.2 s.u. and zinc concentrations in the range of 0.02 mg/l. We believe that the Colt Street facility will afford the necessary wastewater treatment to ensure the discharge will not have any adverse impacts on the environment.

As discussed, the excavation phase of the project has already begun and obtaining this modification to the Emergency Discharge Authorization in a timely manner has become paramount to meeting the construction schedule set for the project. Our client is currently performing the remediation of Willow Brook and Willow Brook Pond under departmental Consent Order SRD-130. To meet the timeframes stipulated within this order as well as other local, State and Federal regulatory approvals for the project, dewatering activities that are required to accommodate the remediation/excavation phase of the project must be initiated in the next week.

If you should have any questions or comments, please contact Boris Tomicic or me at (860) 747-6181.



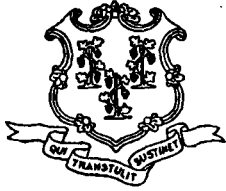
DEP
October 4, 2001
Page 2 of 2

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Brian A. Cutler, P.E., L.E.P.
Vice President

Cc: Lauren Levine, UTC
John Wotus, UTC/P&W



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



EMERGENCY AUTHORIZATION MODIFICATION

- I. Pursuant to Connecticut General Statutes (C.G.S.) 22a-6k, an Emergency Authorization is hereby issued to:

United Technologies Corporation, Pratt & Whitney Division
400 Main Street - Mail Stop 165-35
East Hartford, CT 06108

to initiate, create, originate or maintain a discharge to the waters of the state at:

The Connecticut River via DSN 001 of NPDES Permit Number CT0001376 or,
Willow Brook via Existing and Project Specific Conveyances at:
United Technologies Corporation, Pratt & Whitney Division
400 Main Street
East Hartford, CT 06108

- II. This Emergency Authorization specifically allows the discharger to discharge Willow Pond dewatering, excavation dewatering, and gravity sediment dewatering wastewater contaminated with PCBs, volatile organic compounds and metals generated as a result of a DEP ordered Removal Action (SRD-130).
- III. This Emergency Authorization shall become effective on the date it is issued, and shall expire: 1) December 30, 2001 unless renewed by the Department of Environmental Protection; 2) when compliance with Pratt & Whitney's registration under the General Permit for the Discharge of Groundwater Remediation Wastewater to a Sanitary Sewer (reference GGR001013 received 5/25/01) can be maintained; 3) upon issuance of an individual permit pursuant to C.G.S. 22a-430 as amended; 4) immediately upon notification of a tentative determination to deny a permit; or 5) when the discharge ceases; **whichever is sooner**.
- IV. The fee of \$500.00 has been submitted for issuance of this Authorization.
- V. This Authorization has been issued based on the following submittals:
- A. Application number 2001-08EA received August 20, 2001.
 - B. General Permit Registration GGR001013 received May 25, 2001.
 - C. A request for modification received October 5, 2001.

VI. A. **DEFINITIONS**

The definitions of terms used in this Authorization shall be the same as the definitions contained in C.G.S. section 22a-423, and section 22a-430-3(a) of the Regulations of Connecticut State Agencies.

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1901  2001

Any person who, or municipality which initiates, creates, originates, or maintains a discharge for which an authorization is issued must comply with that authorization. If the source or activity generating the discharge for which an authorization is issued is owned by one person or municipality but is leased or in some other way the legal responsibility of another person or municipality (the discharger), the discharger is responsible for compliance with any authorization issued by the Commissioner.

B. **SPECIAL CONDITIONS**

- 1) The following discharge limits shall not be exceeded at any time, both at the influent to the treatment system approved per NPDES Permit Number CT0001376 and to discharges directly to Willow Brook:

- | (a) | <u>Pollutant</u> | <u>Limits</u> |
|-----|--|---------------------------|
| | Total Daily Flow | 1,008,000 gallons per day |
| | Maximum Instantaneous Flow | 700 gallons per minute |
| | Total Volatile Organics
(EPA methods 601 & 602 plus xylenes
or EPA method 624) | 50.0 ug/l |
| | Total PCBs (EPA Method 608) | 0.5 ug/l |
- (b) Discharges directly to Willow Brook shall also comply with the following limits:
- | | <u>Pollutant</u> | <u>Limits</u> |
|--|------------------|---------------|
| | Total Copper | 0.1 mg/l |
| | Total Lead | 0.01 mg/l |
| | Total Zinc | 0.1 mg/l |
- (c) The pH of any discharge to Willow Brook shall not be less than 5.0 or greater than 8.5 standard units at any time.
- (d) The discharge shall not contain a visible oil sheen, and shall not cause the appearance of a visible oil sheen or the appearance of visible discoloration, foaming, or floating solids in the receiving water.
- (e) During all periods of discharge all limitations specified in NPDES Permit Number CT0001376 shall be complied with, except Total Daily Flow, Maximum Instantaneous Flow and Average Daily Flow. Limitations on flow rates shall be reflective of the NPDES permitted flow rates plus flow rates authorized herein.

- 2) **AQUATIC TOXICITY:** The following protocol for monitoring discharge toxicity shall be followed:
- (a) Monitoring for aquatic toxicity shall be conducted within 7 days of commencement of discharge under this Authorization to Willow Brook, and monthly thereafter for the duration of this Authorization.
 - (b) Effluent samples shall be collected, handled and tested following the protocol for static non-renewal acute toxicity testing in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA 600/4-90/027F), except as specified by RCSA 22a-430-3(j)(7)(A)(I).
 - (c) Neonatal Daphnia pulex (less than 24 hours old) and juvenile Pimephales promelas (1 to 14 days old, with no greater than a 24 hour range in age) shall be used as test organisms.
 - (d) Test duration shall be 48 hours for both D. pulex and P. promelas.
 - (e) Results shall be submitted within 45 days of sampling to:
Donald Gonyea, Environmental Analyst
Bureau of Water Management - PERD
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127
- 3) The following conditions shall be met:
- (a) All discharges authorized herein shall be discharges via DSN 001 of CT0001376 unless monitoring indicates that all limitations for discharge to Willow Brook specified in section VI.B.1) of this Authorization are complied with. All treatment system(s) shall be installed and maintained as necessary to ensure that all limitations are met.
 - (b) Erosion and sediment controls shall be utilized when necessary. These controls must comply with the standards set forth in the "Connecticut Guidelines for Soil Erosion and Sediment Control" as amended, available from the Connecticut Council on Soil and Water Conservation.
 - (c) Stabilization practices shall be implemented to ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include; temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other vegetative and non-structural measures as may be identified by the guidelines. Where construction activities have permanently ceased, or have been suspended for more than 30 days, or when final grades are

reached at any portion of the site, stabilization practices shall be implemented within 7 days.

- (d) Off-site tracking of sediments and dust generation shall be minimized.
 - (e) For consistency with Federal Resource Conservation and Recovery Act: Solid waste, including but not limited to contaminated soils or sludges, may be generated as a result of the remediation activity allowed by this Authorization. All waste generated must be disposed of in accordance with applicable federal, state and local law. Some or all of these wastes may be hazardous waste identified in accordance with Section 3001 of the Federal Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) or other wastes of special concern requiring Department approval prior to disposal. It is the responsibility of the authorized person or municipality to ensure that all wastes generated are properly identified and that all necessary Department approvals are secured prior to disposal of the wastes. For further information regarding solid waste management, please contact the Waste Engineering and Enforcement Division of the Department of Environmental Protection at (860) 424-3023.
- 4) Monitoring and treatment shall be as follows:
- (a) Unless otherwise specified in this Authorization, all samples collected to verify compliance with the limits in this Authorization shall be grab samples. All wastewater samples shall be composed solely of the discharge authorized by this Authorization prior to combination with wastewaters of any other type, except as specified by this Authorization, or receiving waters. All samples shall be representative of the discharge during standard operating conditions.
 - (b) For all discharges to Willow Brook, at the initiation of a discharge, restart after a violation of authorization limits, or initiation of a new or modified activity generating a discharge under this Authorization, the discharge shall be sampled for the parameters in section VI.B.1) of this Authorization. After such initiation monitoring shall be conducted weekly at a minimum.
In addition, monitoring shall be conducted as necessary to evaluate treatment system efficiency and compliance with Authorization limits.
 - (c) For all dewatering wastewaters discharged to the treatment system approved per DSN 001 of NPDES Permit Number CT0001376, at the initiation of a discharge, restart after a violation of authorization limits, or initiation of an new or modified activity generating a discharge under this Authorization, the wastewater shall be sampled for the parameters in section VI.B.1) of this Authorization, excluding metals. After such initiation monitoring shall be conducted weekly at a minimum.
In addition, monitoring shall be conducted as necessary to evaluate treatment system efficiency and compliance with Authorization limits.

- (d) All sample analyses which are required by this Authorization and the reporting of such analyses shall be conducted by a laboratory certified by the Connecticut Department of Public Health. Analyses shall be performed using methods approved in accordance with 40 CFR 136, which are capable of achieving limits of detection below the level established as an effluent limitation in this Authorization.
- (e) Treatment system specifications for any discharge to Willow Brook shall be submitted to the Bureau of Water Management 24 hours prior to installation, or modification unless modification is necessary to insure compliance with Authorization limits. If such modifications are implemented to insure compliance, specifications shall be submitted within 24 hours of implementation. Submittal shall be made to the address in section VI.B.5)(b) of this Authorization or via fax at (860) 424-4057.

5) **REPORTING REQUIREMENTS:**

- (a) Unless otherwise stated in this Authorization, within two weeks of sampling, monitoring reports shall be entered on the attached form (or copy of it) and submitted to:

Attention: DMR Processing
Bureau of Water Management - PERD
79 Elm Street
Hartford, CT 06106-5027

- (b) If a violation of any of the discharge limits specified in this Authorization occurs, **the Bureau of Water Management must be contacted immediately**, and written notification must be submitted to the DEP within 24 hours at the following address:

Authorization Coordinator
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127.

Immediate notification shall be made to either Donald Gonyea at (860) 424-3827, Richard Hathaway at (860) 424-3780, or Jan Czeczotka at (860) 424-3784.

- (c) The discharger shall notify the DEP in writing of the date of final discontinuance of the discharge.
- 6) This Authorization shall be non-transferrable.

- 7) The discharger shall comply with the following Regulations of Connecticut State Agencies, which are hereby incorporated into this Authorization as if fully set herein:

Section 22a-430-3

Subsection (b) General - subparagraph (1)(D) and subdivisions (2), (3), (4) and (5)

Subsection (c) Inspection and entry

Subsection (d) Effect of a Permit - subdivisions (1) and (4)

Subsection (e) Duty to Comply

Subsection (f) Proper Operation and Maintenance

Subsection (g) Sludge Disposal

Subsection (h) Duty to Mitigate

Subsection (i) Facility Modifications, Notification - subdivisions (1) and (4)

Subsection (j) Monitoring Records and Reporting Requirements - subdivisions (1), (6), (7), (8), (9), and (11) (except subparagraphs (9)(A)(2), and (9)(C))

Subsection (k) Bypass

Subsection (m) Effluent Limitations Violations

Subsection (n) Enforcement

Subsection (o) Resource Conservation

Subsection (p) Spill Prevention and Control

Subsection (q) Instrumentation, Alarms, Flow Recorders

Subsection (r) Equalization

Section 22a-430-4

Subsection (t) Prohibitions

Subsection (p) Revocation, Denial, Modification, Appendices

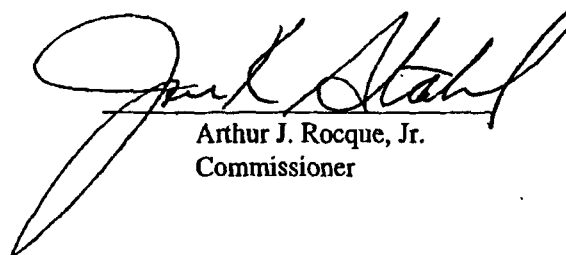
- 8) The following additional terms and conditions shall be complied with:

- (a) This Authorization is for the discharge of (a) pollutants in quantities and concentrations as specified in this Authorization; and (b) any substances resulting from the processes or activities described in this Authorization in concentrations and quantities which the Commissioner determines cannot reasonably be expected to cause pollution and will not adversely affect the operation of a POTW. The Commissioner may seek an injunction or issue an order to prevent or abate pollution, and may seek criminal penalties against a person who willfully or with criminal negligence causes or threatens pollution.
- (b) Discharge of any substance which is not from the processes or activities described in this Authorization shall be considered a violation of this Authorization unless it is authorized by an individual permit issued under Section 22a-430 of the General Statutes or a general permit issued under section 22a-430b of the General Statutes.

- 9) Within fifteen days after the date the discharger becomes aware of a change in any information submitted to the Commissioner under any registration of this Authorization, or that any such information was inaccurate or misleading or that any relevant information was omitted, the discharger shall submit the correct or omitted information in writing to the Commissioner.
- 10) Nothing in this Authorization shall relieve the discharger of other obligations under applicable federal, state and local law.
- 11) Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this Authorization by the discharger shall be signed by the discharger and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."
- 12) Any false statement in any information submitted pursuant to this Authorization may be punishable as a criminal offense under:
- Section 22a-438 of the General Statutes or, in accordance with Section 22a-6, under Section 53a-157 of the General Statutes.
- 13) The Commissioner reserves the right to make appropriate revisions to this Emergency Authorization in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be necessary to adequately protect human health and the environment.
- 14) The Commissioner may order summary suspension of this Authorization in accordance with Section 4-182 of the Connecticut General Statutes.

Entered as an Emergency Authorization of the Commissioner of Environmental Protection.

10/12/01
Date


Arthur J. Rocque, Jr.
Commissioner

Facility ID. 043-061
Application No. 2001-08EA
Authorization No. EA0100183M

INITIAL SCREENING OR SUBSEQUENT MONITORING RESULTS

(Attach copy of laboratory results)

MAIL TO:

Attention: **DMR Processing**
Bureau of Water Management, PERD
CT Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

FACILITY ID. 043-061 APPLICATION NO. 2001-08EA AUTHORIZATION NO. EA0100183M

NAME OF DISCHARGER: United Technologies Corporation, Pratt & Whitney Division

SITE NAME & ADDRESS United Technologies Corporation, Pratt & Whitney Division - 400 Main Street -

East Hartford, CT 06108

DISCHARGE LOCATION: The Connecticut River via CT0001376
(Name of waterbody or sanitary sewer)

WATER QUALITY CLASSIFICATION: B/A

Sample Date: _____

Number of hours of discharge for each day of sample collection: _____

Check one: INITIAL SCREENING OF RAW WATER _____ SUBSEQUENT MONITORING ___To Willow Brook___

Reporting of the following parameters is required. Requirements for reporting a specific parameter are indicated on the Authorization form. For initial screening, report additional parameters that are known or suspected to be present. For subsequent monitoring, if any parameters exceed limits specified in this Authorization, report the results and place "FAIL" in the space provided, otherwise place "PASS" in the space provided.

POLLUTANT
PARAMETER

RESULTS

LIMITS

Maximum Daily Flow	-----	1,008,000 gpd
Total Daily Flow	_____	-----
Instantaneous Flow (at time of grab sample collection)	_____	700 gpm
Total Volatile Organics EPA Method 601 & 602 plus xylenes	_____	10 ug/l
Total PCBs (EPA Method 608)	_____	0.5 ug/l
Total Copper	_____	0.1
Total Lead	_____	0.01
Total Zinc	_____	0.1
pH	_____	6.5-9.5 s.u.

ALL PARAMETERS SPECIFIED ABOVE ("PASS OR "FAIL") _____

AUTHORIZATION

INITIAL SCREENING OR SUBSEQUENT MONITORING RESULTS

(Attach copy of laboratory results)

I certify that I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense. I certify that all discharge limitations of this authorization have been met, otherwise if a violation of any of the discharge limits occurs, **the Bureau of Water Management must be contacted immediately**, and written notification must be submitted to the DEP within twenty-four hours.

Date

Name:

Title:

At the time of **Final Discontinuance** of the discharge for which this Authorization was issued, please indicate:

Date of termination of discharge _____

Has an application for an individual permit or has a registration for a general permit been submitted for this discharge?

Date of submission _____

YOU MUST SUBMIT THE ABOVE INFORMATION AT THE TIME OF FINAL DISCONTINUANCE OF THE DISCHARGE. OTHERWISE YOU WILL RECEIVE A NOTICE OF VIOLATION FOR MISSING DISCHARGE MONITORING (DMR's).

cc: Town Water Pollution Control Authority (sanitary sewer discharges only)
Town Engineer (surface water discharges)

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney

A United Technologies Company

November 9, 2001

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127

Post-It® Fax Note	7671	Date	11/7	# of pages	2
To	Brian Cutler		From	D. Geller	
Co./Dept.			Co.		
Phone #			Phone #	565-2348	
Fax #	747-8822		Fax #		

Attn: Authorization Coordinator

RE: Emergency Authorization No. EA0100183M
United Technologies Corp., Pratt & Whitney Division
East Hartford, Connecticut

Dear Mr. Gonyea:

In accordance with VI.B.5)(b) of the above referenced Emergency Authorization (EA), Pratt & Whitney is herein notifying the State of Connecticut Department of Environmental Protection, Bureau of Water Management that an exceedance of the applicable pollutant limits defined in the EA was encountered during the compliance monitoring performed on November 2, 2001. The referenced EA authorizes discharge from the Willow Brook Pond remediation project to the Pratt & Whitney, Colt Street wastewater treatment system approved through NPDES Permit No. CT0001376 or directly to Willow Brook. The discharge during this exceedance was directed through the Colt Street treatment facility.

The associated sampling was performed on November 2, 2001 and the analytical data was received November 9, 2001. Exceedances were encountered for total VOCs and total PCBs as follows:

<u>Detected Constituents</u>	<u>Concentration Detected (ug/l)</u>	<u>EA Limit (ug/l)</u>
1,1,1-Trichloroethane	9.8	
cis-1,2-Dichloroethene	28	
Trichloroethene (TCE)	28	
Total VOCs	65.8	50.0
Aroclor 1248	0.88	0.5

Pursuant to the above referenced requirements, upon receipt of the analytical data, John M. Wotus of Pratt & Whitney immediately made notification to Mr. Donald Gonyea via telephone on November 9, 2001 at 1 pm.

Dewatering in the area represented by this particular sampling event (referred to as upper Willow Brook Pond) was terminated November 7, 2001 at approximately 5:00 pm. Future dewatering

within this particular area, if necessary, will be performed with the use of a treatment system specifically designed to effectively remove the constituents of concern.

Dewatering is expected to proceed in another portion of the site (referred to as lower Willow Brook Pond) upon receipt of the initial screening data. This discharge will be directed through the Colt Street treatment facility or directly into Willow Brook Pond as appropriate, based on the analytical data. Treatment of this discharge will be implemented if necessary to meet the applicable limits of the EA as appropriate.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Lorin Sodell
Chief Manufacturing Engineer,
Director of Facilities & Services

LAS/LEA/jmw



November 29, 2001

**State of Connecticut
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, CT 06106-5127**

Attn: Authorization Coordinator

**RE: Emergency Authorization No. EA0100183M
United Technologies Corp., Pratt & Whitney Division
East Hartford, Connecticut**

WATER MANAGEMENT BUREAU

NOV 29 2001

RECEIVED

RECEIVED

NOV 29 2001

WATER MANAGEMENT BUREAU

Dear Mr. Gonyea:

In accordance with VI. B.4)(e) of the above referenced Emergency Authorization (EA), Pratt & Whitney is herein notifying the State of Connecticut Department of Environmental Protection, Bureau of Water Management that a groundwater treatment system will be installed as necessary to remove pollutants from the dewatering wastewaters generated from the western portion of the site prior to discharge into Willow Brook.

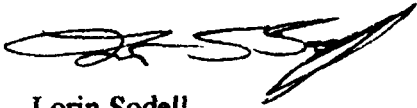
This particular wastewater stream is specifically associated with the wetland area dewatering activities (located toward the western portion of the site). Dewatering within the lower pond area (central portion of the site) will continue and will be separately pretreated and discharged to the Pratt & Whitney Colt Street wastewater treatment facility.

The treatment system for the wetland dewatering activities consists of initial settling in an 18,000 gallon weir tank, then filtration through 25 or 50-micron filter media followed by air stripping through one low-profile air stripping unit. A Process and Instrumentation Diagram (P&ID) including the specifications of the equipment is attached. Based on the analytical data derived from the raw water screening and the theoretical modeling prepared by the equipment manufacturer/supplier, the treatment system provided is expected to adequately remove the VOCs present to a concentration below the limits included in the EA for discharge to Willow Brook.

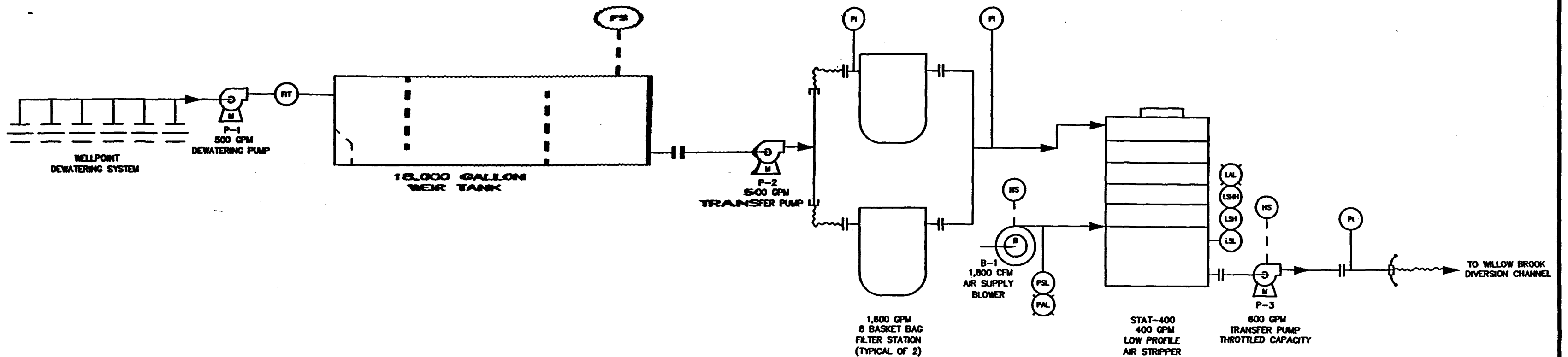
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and

complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lorin Sodell', with a stylized flourish extending from the end.

Lorin Sodell
Chief Manufacturing Engineer
Director, Facilities & Services



LEGEND

PI	PRESSURE INDICATOR
HS	HAND SWITCH
LSH	LEVEL SWITCH HIGH
LSHH	LEVEL SWITCH HIGH HIGH
LSL	LEVEL SWITCH LOW
FIT	FLOW INDICATOR TOTALIZER
M	MOTOR
FIT	FLOW INDICATOR TOTALIZER
----	ELECTRICAL
—	PIPING
— —	FLEXIBLE HOSE
— —	VALVE

WETLAND DEWATERING TREATMENT SYSTEM UNITED TECHNOLOGIES CORP./PRATT & WHITNEY		
WILLOW BROOK & WILLOW BROOK POND P & I D		
Comm.No. 88UT103	FIGURE 1	LEA

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 2

Site Plan

**US EPA New England
RCRA Document Management System
Image Target Sheet**

RDMS Document ID # 100506

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-2

Purpose of Target Sheet:

☒ **Oversized (in Site File)** ☐ **Oversized (in Map Drawer)**

☐ **Page(s) Missing (Please Specify Below)**

☐ **Privileged** ☐ **Other (Provide
Purpose Below)**

Description of Oversized Material, if applicable:

ATTACHMENT NO. 2: SITE PLAN

☒ **Map** ☐ **Photograph** ☐ **Other (Specify Below)**

*** Please Contact the EPA New England RCRA Records Center to View This Document ***

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 3

**Confirmatory Soil Sampling Analytical Data
And
Excavation Limits and Sample Location Maps**

**US EPA New England
RCRA Document Management System
Image Target Sheet**

RDMS Document ID # 100506

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-2

Purpose of Target Sheet:

☒ **Oversized (in Site File)** ☐ **Oversized (in Map Drawer)**

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Purpose Below)**

Description of Oversized Material, if applicable:

**ATTACHMENT NO. 3 SHEET 1: UPPER POND BOTTOM
COMPOSITE SAMPLES & BOTTOM GRAB SAMPLES**

☒ **Map** ☐ **Photograph** ☐ **Other (Specify Below)**

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Phase Classification: R-2

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Purpose Below)**

Description of Oversized Material, if applicable:

ATTACHMENT NO. 3 SHEET 2: OIL/ WATER
SEPARATOR BOTTOM COMPOSITE SAMPLES &
BOTTOM GRAB SAMPLES

☒ **Map** ☐ **Photograph** ☐ **Other (Specify Below)**

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Facility Name: PRATT & WHITNEY MAIN STREET

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Phase Classification: R-2

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Purpose Below)**

Description of Oversized Material, if applicable:

**ATTACHMENT NO. 3 SHEET 3: UPPER POND SIDE
WALL COMPOSITE SAMPLES & SIDE WALL GRAB
SAMPLES**

☒ **Map** ☐ **Photograph** ☐ **Other (Specify Below)**

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**US EPA New England
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Image Target Sheet**

RDMS Document ID # 100506

Facility Name: PRATT & WHITNEY MAIN STREET

Facility ID#: CTD990672081

Phase Classification: R-2

Purpose of Target Sheet:

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Purpose Below)**

Description of Oversized Material, if applicable:

**ATTACHMENT NO. 3 SHEET 4: OIL/ WATER
SEPARATOR SIDE WALL COMPOSITE SAMPLES &
SIDE WALL GRAB SAMPLES**

☒ **Map** ☐ **Photograph** ☐ **Other (Specify Below)**

*** Please Contact the EPA New England RCRA Records Center to View This Document ***

Table 1
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Page 1 of 3

Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WT-CS-02-003	2001188	10/26/01			SS						X		
WT-CS-02-018	2001287	11/ 9/01			SS		x	x			x	X	X
WT-CS-02-020	2001289	11/ 9/01			SS		x	X			X	X	X
WT-CS-02-023	2001293	11/ 9/01			SS		x	X			X	X	X
WT-CS-02-025	2001295	11/ 9/01			SS		x	X			X	X	X
WT-CS-02-025	2001296	11/ 9/01			SS		x	X			X	X	X
WT-CS-02-027	2001298	11/ 9/01			SS		x	X			X	X	X
WT-CS-02-030	2001305	11/13/01			SS		x	X			X	X	X
WT-CS-02-032	2001308	11/13/01			SS		x	X			X	X	X
WT-CS-02-034	2001368	11/28/01			SS		x	x			x	X	x
WT-CS-02-036	2001370	11/28/01			SS		x	X			X	X	X
WT-CS-02-038	2001373	11/28/01			SS		x	x			x	X	x
WT-CS-02-040	2001375	11/28/01			SS		x	x			x	X	x
WT-CS-02-042	2001377	11/28/01			SS		x	X			x	X	x
WT-CS-02-042	2001378	11/28/01			SS		x	X			x	X	x
WT-CS-02-044	2001380	11/28/01			SS		x	x			X	X	x
WT-CS-02-046	2001382	11/28/01			SS		x	x			x	X	x
WT-CS-02-048	2001384	11/28/01			SS		x	X			X	X	X
WT-CS-02-050	2001387	11/29/01			SS		X	X			X	X	X
WT-CS-02-052	2001390	11/29/01			SS		x	X			X	X	X
WT-CS-02-054	2001392	11/29/01			SS		x	X			X	X	x
WT-CS-02-054	2001393	11/29/01			SS		x	X			x	X	x
WT-CS-02-056	2001395	11/29/01			SS		x	X			X	X	X
WT-CS-02-058	2001397	11/29/01			SS		x	X			X	X	X
WT-CS-03-008	2001277	11/ 9/01			SS		x	X			X	X	X
WT-CS-03-010	2001279	11/ 9/01			SS		x	X			x	X	X
WT-CS-03-012	2001281	11/ 9/01			SS		x	X			X	X	X
WT-CS-03-020	2001323	11/27/01			SS		x	x			X	X	x
WT-CS-03-022	2001325	11/27/01			SS		x	X			X	X	x
WT-CS-03-024	2001327	11/27/01			SS		x	x			X	X	x
WT-CS-03-026	2001329	11/27/01			SS		x	x			x	X	x

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected

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Table 1
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Page 2 of 3

Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WT-CS-03-028	2001338	11/27/01			SS		x	x			x	X	x
WT-CS-03-030	2001340	11/27/01			SS		x	x			x	X	x
WT-CS-03-032	2001343	11/27/01			SS		x	x			x	X	x
WT-CS-03-034	2001345	11/27/01			SS		x	x			x	X	x
WT-CS-03-034	2001356	11/27/01			SS		x	x			x	X	x
WT-CS-03-038	2001362	11/29/01			SS		x	x			X	X	x
WT-CS-03-040	2001364	11/29/01			SS		x	X			x	X	X
WT-CS-03-042	2001366	11/29/01			SS		X	X			x	X	X
WT-CS-03-043	2001401	11/30/01			SS			X				X	
WT-CS-03-045	2001435	12/ 4/01			SS		x	X			x	X	X
WT-CS-03-047	2001437	12/ 4/01			SS		x	x			x	X	x
WT-CS-03-048	2001438	12/ 4/01			SS		x	x			x	X	x
WT-CS-04-003	2001209	10/30/01			SS						x		
WT-CS-04-027	2001235	11/ 6/01			SS		x	x			X	X	x
WT-CS-04-029	2001237	11/ 6/01			SS		x	x			x	X	x
WT-CS-04-031	2001239	11/ 6/01			SS		x	x			x	X	X
WT-CS-04-033	2001241	11/ 6/01			SS		x	X			x	X	X
WT-CS-04-035	2001243	11/ 6/01			SS		x	x			x	X	x
WT-CS-04-035	2001245	11/ 6/01			SS		x	x			x	X	X
WT-CS-04-037	2001247	11/ 6/01			SS		x	X			X	X	X
WT-CS-04-041	2001251	11/ 6/01			SS		x	X			X	X	x
WT-CS-04-043	2001253	11/ 6/01			SS		x	X			x	X	x
WT-CS-04-045	2001255	11/ 6/01			SS		x	X			X	X	x
WT-CS-04-047	2001257	11/ 6/01			SS		x	X			X	X	X
WT-CS-04-049	2001259	11/ 6/01			SS		x	x			x	X	x
WT-CS-04-051	2001261	11/ 6/01			SS		x	X			X	X	x
WT-CS-04-053	2001263	11/ 6/01			SS		x	X			X	X	X
WT-CS-04-055	2001265	11/ 6/01			SS		x	X			X	X	X
WT-CS-04-057	2001267	11/ 6/01			SS		x	X			X	X	x
WT-CS-04-065	2001410	12/ 3/01			SS		x	X			x	X	x
WT-CS-04-067	2001412	12/ 3/01			SS		x	x			x	X	x
WT-CS-04-069	2001414	12/ 3/01			SS		x	x			x	X	x

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected

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Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Page 1 of 24

	Location ID	WT-CS-02-003	WT-CS-02-018	WT-CS-02-020	WT-CS-02-020	WT-CS-02-023	WT-CS-02-023	WT-CS-02-025
	Sample ID	2001188	2001287	2001289	2001289	2001293	2001293	2001295
	Sample Date	10/26/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001
	Sample Time	10:23	15:00	15:10	15:10	15:25	15:25	15:30
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E110C69-3	E111435-12A	E111435-14A	E111660-14	E111435-18A	E111660-18	E111435-20A
Constituent	Units							
Date PCBs Analyzed	-	10/28/2001		11/10/2001	11/16/2001	11/11/2001	11/16/2001	11/11/2001
Date Metals Analyzed	-		11/13/2001	11/13/2001		11/13/2001		11/13/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-		11/13/2001	11/13/2001		11/13/2001		11/13/2001
Date Semi-volatile Organics Analyzed	-			11/13/2001		11/13/2001		11/13/2001
Arsenic	mg/kg		2.4 Y	1.1 Y				0.68 Y
Barium	mg/kg		41 Y	31 Y		20 Y		28 Y
Cadmium	mg/kg			0.74 Y				3.5 Y
Chromium	mg/kg		13 Y	34 Y		7.8 Y		73 Y
Copper	mg/kg		9.9 Y	11 Y		12 Y		31 Y
Lead	mg/kg		20 Y	21 Y		13 Y		44 Y
Mercury	mg/kg		0.11 Y	0.10 Y		0.072 Y		0.20 Y
Nickel	mg/kg		9.4 Y	31 Y		8.2 Y		88 Y
Silver	mg/kg							2.6 Y
Zinc	mg/kg		33 Y	28 Y		24 Y		58 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg	47000 Y		2000 YJ	1600 Y	80 YJ	170 Y	47000 YJ
PCB 1260	µg/kg							
Cyanide	mg/kg							2.6 Y
TPH	mg/kg		540 Y	520 Y		480 Y		920 Y
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							200 Y
Anthracene	µg/kg					760 Y		200 Y
Benzo[a]anthracene	µg/kg					2000 Y		860 Y
Benzo[a]pyrene	µg/kg					1400 Y		980 Y
Benzo[b]fluoranthene	µg/kg					1600 Y		910 Y
Benzo[ghi]perylene	µg/kg					310 Y		340 Y
Benzo[k]fluoranthene	µg/kg					1200 Y		920 Y
Carbazole	µg/kg					380 Y		

Notes: 1. Only Detects Shown
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Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

Page 3 of 24

	Location ID	WT-CS-02-025	WT-CS-02-025	WT-CS-02-025	WT-CS-02-027	WT-CS-02-027	WT-CS-02-030	WT-CS-02-032
	Sample ID	2001295	2001296	2001296	2001298	2001298	2001305	2001308
	Sample Date	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/13/2001	11/13/2001
	Sample Time	15:30	15:40	15:40	15:45	15:45	18:35	18:45
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111660-20	E111435-21A	E111660-21	E111435-23A	E111660-23	E111539-2A	E111539-5A
Constituent	Units							
Date PCBs Analyzed	-	11/17/2001	11/11/2001	11/17/2001	11/09/2001	11/17/2001	11/14/2001	11/14/2001
Date Metals Analyzed	-		11/13/2001		11/13/2001		11/15/2001	11/15/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-		11/13/2001		11/13/2001		11/16/2001	11/16/2001
Date Semi-volatile Organics Analyzed	-		11/13/2001		11/13/2001		11/15/2001	11/15/2001
Arsenic	mg/kg				0.96 Y		2.7 Y	2.0 Y
Barium	mg/kg		18 Y		26 Y		42 Y	39 Y
Cadmium	mg/kg		3.0 Y		0.29 Y		5.9 Y	6.1 Y
Chromium	mg/kg		55 Y		33 Y		160 Y	150 Y
Copper	mg/kg		24 Y		16 Y		35 Y	34 Y
Lead	mg/kg		35 Y		30 Y		50 Y	45 Y
Mercury	mg/kg		0.46 Y		0.088 Y		0.18 Y	0.22 Y
Nickel	mg/kg		68 Y		24 Y		160 Y	160 Y
Silver	mg/kg		2.7 Y		0.21 Y		1.3 Y	1.2 Y
Zinc	mg/kg		59 Y		34 Y		46 Y	41 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg	36000 Y	12000 YJ	9300 Y	1400 YJ	2200 Y	17000 Y	17000 Y
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg		3000 Y		650 Y		550 Y	1500 Y
Acenaphthalene	µg/kg		300 Y		180 Y			
Acenaphthylene	µg/kg		180 Y					
Anthracene	µg/kg		220 Y		370 Y			
Benzo[a]anthracene	µg/kg		940 Y		970 Y			
Benzo[a]pyrene	µg/kg		1000 Y		800 Y		210 Y	
Benzo[b]fluoranthene	µg/kg		900 Y		800 Y		210 Y	
Benzo[ghi]perylene	µg/kg		330 Y					
Benzo[k]fluoranthene	µg/kg		990 Y		860 Y			
Carbazole	µg/kg				370 Y			

Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-02-034	WT-CS-02-036	WT-CS-02-038	WT-CS-02-040	WT-CS-02-042	WT-CS-02-042	WT-CS-02-044
	Sample ID	2001368	2001370	2001373	2001375	2001377	2001378	2001380
	Sample Date	11/28/2001	11/28/2001	11/28/2001	11/28/2001	11/28/2001	11/28/2001	11/28/2001
	Sample Time	11:50	12:00	12:15	12:20	12:28	12:30	13:08
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111B35-2A	E111B35-4A	E111B35-7A	E111B35-9A	E111B35-11A	E111B35-12A	E111B35-14A
Constituent	Units							
Date PCBs Analyzed	-		11/28/2001					11/28/2001
Date Metals Analyzed	-	12/03/2001	12/03/2001	12/03/2001	12/03/2001	12/03/2001	12/03/2001	12/03/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-		11/29/2001					
Date Semi-volatile Organics Analyzed	-		11/30/2001			11/30/2001	11/30/2001	
Arsenic	mg/kg					2.5 Y	1.7 Y	0.56 Y
Barium	mg/kg	18 Y	23 Y	12 Y	17 Y	30 Y	30 Y	9.4 Y
Cadmium	mg/kg					0.16 Y	0.24 Y	
Chromium	mg/kg	12 Y	12 Y	7.8 Y	7.4 Y	7.6 Y	7.8 Y	6.6 Y
Copper	mg/kg	6.8 Y	7.9 Y	3.2 Y	2.6 Y	22 Y	12 Y	4.1 Y
Lead	mg/kg	5.9 Y	3.8 Y	2.9 Y	3.1 Y	22 Y	25 Y	2.0 Y
Mercury	mg/kg					0.045 Y	0.048 Y	
Nickel	mg/kg	11 Y	26 Y	9.0 Y	7.6 Y	8.0 Y	8.0 Y	11 Y
Silver	mg/kg							
Zinc	mg/kg	12 Y	17 Y	12 Y	13 Y	70 Y	62 Y	11 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg		810 Y					120 Y
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg		380 Y					
Acenaphthalene	µg/kg						880 Y	
Acenaphthylene	µg/kg					380 Y		
Anthracene	µg/kg					370 Y	1700 Y	
Benzo[a]anthracene	µg/kg					1100 Y	2500 Y	
Benzo[a]pyrene	µg/kg					1300 Y	2400 Y	
Benzo[b]fluoranthene	µg/kg					1500 Y	3100 Y	
Benzo[ghi]perylene	µg/kg					730 Y	920 Y	
Benzo[k]fluoranthene	µg/kg					1200 Y	1200 Y	
Carbazole	µg/kg					260 Y	990 Y	

Notes: 1. Only Detects Shown
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Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-02-046	WT-CS-02-048	WT-CS-02-050	WT-CS-02-052	WT-CS-02-054	WT-CS-02-054	WT-CS-02-056
	Sample ID	2001382	2001384	2001387	2001390	2001392	2001393	2001395
	Sample Date	11/28/2001	11/28/2001	11/29/2001	11/29/2001	11/29/2001	11/29/2001	11/29/2001
	Sample Time	13:15	13:20	09:25	09:55	10:05	10:10	10:16
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111B35-16A	E111B35-18A	E111C63-1A	E111C63-2A	E111C63-3A	E111C63-4A	E111C63-5A
Constituent	Units							
Date PCBs Analyzed	-		11/29/2001	11/30/2001	12/03/2001	12/03/2001		11/30/2001
Date Metals Analyzed	-	12/03/2001	12/03/2001	12/04/2001	12/04/2001	12/04/2001	12/04/2001	12/04/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-		11/29/2001	11/30/2001	11/30/2001			11/30/2001
Date Semi-volatile Organics Analyzed	-		11/30/2001	12/05/2001	12/04/2001	12/03/2001	12/03/2001	12/04/2001
Arsenic	mg/kg	16 Y	2.0 Y	2.5 Y	3.1 Y	1.6 Y	1.7 Y	8.0 Y
Barium	mg/kg	20 Y	35 Y	46 Y	33 Y	28 Y	26 Y	43 Y
Cadmium	mg/kg		0.66 Y	23 Y	2.4 Y	0.21 Y	0.59 Y	0.25 Y
Chromium	mg/kg	11 Y	18 Y	100 Y	67 Y	7.6 Y	8.4 Y	17 Y
Copper	mg/kg	5.4 Y	14 Y	42 Y	24 Y	4.9 Y	5.8 Y	16 Y
Lead	mg/kg	8.0 Y	31 Y	180 Y	60 Y	26 Y	34 Y	43 Y
Mercury	mg/kg	0.032 Y	0.11 Y	0.23 Y	0.30 Y	0.074 Y	0.064 Y	0.14 Y
Nickel	mg/kg	11 Y	18 Y	41 Y	55 Y	6.6 Y	7.0 Y	13 Y
Silver	mg/kg			3.9 Y	1.0 Y			0.15 Y
Zinc	mg/kg	18 Y	36 Y	43 Y	35 Y	22 Y	25 Y	69 Y
PCB 1242	µg/kg					380 YJ		
PCB 1254	µg/kg		1000 Y	3600 Y	16000 Y			180 Y
PCB 1260	µg/kg							
Cyanide	mg/kg			1.5 Y				
TPH	mg/kg		160 Y	160 Y	110 Y			160 Y
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg		310 Y	230 Y	320 Y		190 Y	
Benzo[a]anthracene	µg/kg		1000 Y	910 Y	1500 Y		380 Y	180 Y
Benzo[a]pyrene	µg/kg		990 Y	920 Y	1600 Y		290 Y	230 Y
Benzo[b]fluoranthene	µg/kg		930 Y	950 Y	2600 Y		230 Y	360 Y
Benzo[ghi]perylene	µg/kg		500 Y	460 Y	480 Y			
Benzo[k]fluoranthene	µg/kg		910 Y	1000 Y	770 Y		290 Y	
Carbazole	µg/kg							

Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-02-058	WT-CS-03-008	WT-CS-03-008	WT-CS-03-010	WT-CS-03-012	WT-CS-03-012	WT-CS-03-020
	Sample ID	2001397	2001277	2001277	2001279	2001281	2001281	2001323
	Sample Date	11/29/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/27/2001
	Sample Time	10:30	14:20	14:20	14:25	14:35	14:35	13:05
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111C63-6A	E111435-2A	E111660-2	E111435-4A	E111435-6A	E111660-6	E111A64-2A
Constituent	Units							
Date PCBs Analyzed	-	11/30/2001	11/11/2001	11/15/2001		11/11/2001	11/15/2001	11/27/2001
Date Metals Analyzed	-	12/04/2001	11/13/2001		11/13/2001	11/13/2001		11/29/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-	11/30/2001	11/13/2001		11/13/2001	11/13/2001		
Date Semi-volatile Organics Analyzed	-	12/03/2001	11/13/2001		11/13/2001	11/13/2001		
Arsenic	mg/kg	0.66 Y	2.3 Y		1.6 Y	3.0 Y		
Barium	mg/kg	14 Y	44 Y		56 Y	40 Y		16 Y
Cadmium	mg/kg							
Chromium	mg/kg	5.8 Y	14 Y		11 Y	11 Y		11 Y
Copper	mg/kg	9.7 Y	16 Y		14 Y	8.6 Y		1.5 Y
Lead	mg/kg	14 Y	27 Y		30 Y	20 Y		2.8 Y
Mercury	mg/kg	0.10 Y	0.15 Y		0.13 Y	0.14 Y		
Nickel	mg/kg	7.7 Y	13 Y		8.9 Y	8.2 Y		10 Y
Silver	mg/kg		0.28 Y					
Zinc	mg/kg	21 Y	37 Y		38 Y	30 Y		15 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg		85 YJ	320 Y		68 YJ	120 Y	270 Y
PCB 1260	µg/kg	190 Y						
Cyanide	mg/kg							
TPH	mg/kg	450 Y	520 Y		380 Y	920 Y		
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzo[a]anthracene	µg/kg	310 Y				330 Y		
Benzo[a]pyrene	µg/kg	290 Y				300 Y		
Benzo[b]fluoranthene	µg/kg	260 Y				280 Y		
Benzo[ghi]perylene	µg/kg	170 Y						
Benzo[k]fluoranthene	µg/kg	290 Y				240 Y		
Carbazole	µg/kg							

Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-03-022	WT-CS-03-024	WT-CS-03-026	WT-CS-03-028	WT-CS-03-030	WT-CS-03-032	WT-CS-03-034
	Sample ID	2001325	2001327	2001329	2001338	2001340	2001343	2001345
	Sample Date	11/27/2001	11/27/2001	11/27/2001	11/27/2001	11/27/2001	11/27/2001	11/27/2001
	Sample Time	13:15	13:25	13:35	15:35	15:45	15:55	16:05
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111A64-4A	E111A64-6A	E111A64-8A	E111A87-2A	E111A87-4A	E111A87-7A	E111A87-9A
Constituent	Units							
Date PCBs Analyzed	-	11/27/2001	11/27/2001					
Date Metals Analyzed	-	11/29/2001	11/29/2001	11/29/2001	11/29/2001	11/29/2001	11/29/2001	11/29/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-	11/30/2001						
Arsenic	mg/kg	1.5 Y						0.93 Y
Barium	mg/kg	32 Y	14 Y	13 Y	14 Y	26 Y	18 Y	46 Y
Cadmium	mg/kg	12 Y			0.20 Y		0.24 Y	0.44 Y
Chromium	mg/kg	33 Y	5.4 Y	7.0 Y	4.2 Y	5.2 Y	5.1 Y	6.8 Y
Copper	mg/kg	19 Y	0.96 Y	2.7 Y	1.5 Y	5.2 Y	3.3 Y	6.7 Y
Lead	mg/kg	99 Y	1.7 Y	3.2 Y	2.7 Y	27 Y	5.0 Y	44 Y
Mercury	mg/kg	0.053 Y				0.077 Y		0.17 Y
Nickel	mg/kg	10 Y	4.7 Y	6.6 Y	2.8 Y	5.7 Y	7.0 Y	6.8 Y
Silver	mg/kg	0.90 Y			0.32 Y			
Zinc	mg/kg	120 Y	8.7 Y	10 Y	4.3 Y	30 Y	58 Y	50 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg	360 Y	310 Y					
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg							
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Carbazole	µg/kg							

Notes: 1. Only Detects Shown
2. Printed on 12/10/01



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Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-03-034	WT-CS-03-038	WT-CS-03-040	WT-CS-03-042	WT-CS-03-042	WT-CS-03-043	WT-CS-03-045
	Sample ID	2001356	2001362	2001364	2001366	2001366	2001401	2001435
	Sample Date	11/27/2001	11/29/2001	11/29/2001	11/29/2001	11/29/2001	11/30/2001	12/04/2001
	Sample Time	16:10	09:45	09:52	11:05	11:05	10:50	09:55
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111A87-10A	E111C12-4A	E111C12-6A	E111C12-8A	E111C12-8B	E111C58-1A	E112079-2A
Constituent	Units							
Date PCBs Analyzed	-		11/30/2001					
Date Metals Analyzed	-	11/29/2001	12/04/2001	12/04/2001	12/04/2001		12/04/2001	12/05/2001
Date Organics Analyzed	-					11/30/2001		
Date Physical Analyzed	-			12/01/2001	11/30/2001			12/05/2001
Date Semi-volatile Organics Analyzed	-			11/30/2001	12/04/2001		12/04/2001	12/06/2001
Arsenic	mg/kg	1.1 Y	1.4 Y	2.2 Y	4.8 Y		25 Y	0.83 Y
Barium	mg/kg	51 Y	20 Y	30 Y	45 Y		63 Y	31 Y
Cadmium	mg/kg	2.5 Y		10 Y	0.29 Y		0.21 Y	17 Y
Chromium	mg/kg	7.3 Y	7.1 Y	66 Y	9.5 Y		9.4 Y	74 Y
Copper	mg/kg	8.5 Y	12 Y	30 Y	12 Y		15 Y	32 Y
Lead	mg/kg	72 Y	8.2 Y	160 Y	78 Y		68 Y	170 Y
Mercury	mg/kg	0.18 Y	0.036 Y	0.095 Y	0.32 Y		0.32 Y	0.11 Y
Nickel	mg/kg	7.0 Y	9.1 Y	14 Y	11 Y		11 Y	15 Y
Silver	mg/kg			3.0 Y	0.20 Y		1.3 Y	3.3 Y
Zinc	mg/kg	38 Y	21 Y	48 Y	40 Y		82 Y	31 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg		280 Y					
PCB 1260	µg/kg							
Cyanide	mg/kg			0.90 Y				1.1 Y
TPH	mg/kg				220 Y			
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzo[a]anthracene	µg/kg			390 Y	260 Y		520 Y	680 Y
Benzo[a]pyrene	µg/kg			430 Y	300 Y		620 Y	640 Y
Benzo[b]fluoranthene	µg/kg			690 Y	300 Y		1000 Y	980 Y
Benzo[ghi]perylene	µg/kg				200 Y		190 Y	270 Y
Benzo[k]fluoranthene	µg/kg			240 Y	300 Y		320 Y	340 Y
Carbazole	µg/kg							

Notes: 1. Only Detects Shown
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Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-03-047	WT-CS-03-048	WT-CS-04-027	WT-CS-04-029	WT-CS-04-031	WT-CS-04-033	WT-CS-04-035
	Sample ID	2001437	2001438	2001235	2001237	2001239	2001241	2001243
	Sample Date	12/04/2001	12/04/2001	11/06/2001	11/06/2001	11/06/2001	11/06/2001	11/06/2001
	Sample Time	10:02	10:08	11:35	11:45	12:00	12:05	12:15
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E112079-4A	E112079-5A	E111220-2A	E111220-4A	E111220-6A	E111220-8A	E111220-10A
Constituent	Units							
Date PCBs Analyzed	-			11/07/2001				
Date Metals Analyzed	-	12/05/2001	12/05/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-					11/07/2001	11/07/2001	
Date Semi-volatile Organics Analyzed	-						11/08/2001	
Arsenic	mg/kg		0.68 Y	0.94 Y	1.1 Y			
Barium	mg/kg	1.4 Y	12 Y	18 Y	35 Y	41 Y	18 Y	13 Y
Cadmium	mg/kg				0.17 Y	9.0 Y	0.15 Y	
Chromium	mg/kg	5.0 Y	4.6 Y	10 Y	7.4 Y	14 Y	120 Y	5.3 Y
Copper	mg/kg	4.5 Y	3.7 Y	7.4 Y	5.7 Y	8.6 Y	5.6 Y	4.3 Y
Lead	mg/kg	4.5 Y	4.4 Y	12 Y	19 Y	24 Y	14 Y	3.2 Y
Mercury	mg/kg	0.035 Y			0.095 Y	0.073 Y	0.11 Y	
Nickel	mg/kg	5.8 Y	5.8 Y	18 Y	6.5 Y	26 Y	8.9 Y	6.1 Y
Silver	mg/kg							
Zinc	mg/kg	17 Y	12 Y	9.2 Y	58 Y	170 Y	110 Y	15 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg			3300 Y				
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg					510 Y	260 Y	
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Carbazole	µg/kg							

Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-04-035	WT-CS-04-037	WT-CS-04-041	WT-CS-04-043	WT-CS-04-045	WT-CS-04-047	WT-CS-04-049
	Sample ID	2001245	2001247	2001251	2001253	2001255	2001257	2001259
	Sample Date	11/06/2001	11/06/2001	11/06/2001	11/06/2001	11/06/2001	11/06/2001	11/06/2001
	Sample Time	12:20	12:30	12:45	12:55	13:00	13:05	13:10
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111220-12A	E111220-14A	E111220-18A	E111220-20A	E111220-22A	E111220-24A	E111220-26A
Constituent	Units							
Date PCBs Analyzed	-		11/07/2001	11/08/2001		11/08/2001	11/07/2001	
Date Metals Analyzed	-	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001	11/09/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-	11/07/2001	11/07/2001				11/07/2001	
Date Semi-volatile Organics Analyzed	-		11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001	
Arsenic	mg/kg		3.0 Y	2.0 Y	4.4 Y	3.7 Y	1.8 Y	
Barium	mg/kg	16 Y	120 Y	28 Y	53 Y	38 Y	26 Y	14 Y
Cadmium	mg/kg		20 Y	0.61 Y		1.9 Y	1.5 Y	
Chromium	mg/kg	53 Y	320 Y	34 Y	11 Y	85 Y	92 Y	4.6 Y
Copper	mg/kg	4.1 Y	110 Y	70 Y	11 Y	26 Y	25 Y	4.0 Y
Lead	mg/kg	3.3 Y	240 Y	25 Y	27 Y	42 Y	31 Y	3.1 Y
Mercury	mg/kg		0.85 Y	0.50 Y	0.16 Y	0.33 Y	0.19 Y	
Nickel	mg/kg	13 Y	94 Y	20 Y	6.7 Y	53 Y	36 Y	5.4 Y
Silver	mg/kg		12 Y	0.68 Y		1.6 Y	1.1 Y	
Zinc	mg/kg	13 Y	130 Y	42 Y	35 Y	39 Y	38 Y	21 Y
PCB 1242	µg/kg							
PCB 1254	µg/kg			6000 Y		3800 Y	2100 Y	
PCB 1260	µg/kg		810 Y					
Cyanide	mg/kg		1.6 Y					
TPH	mg/kg	220 Y	840 Y				210 Y	
Acenaphthalene	µg/kg					240 Y		
Acenaphthylene	µg/kg							
Anthracene	µg/kg					390 Y		
Benzo[a]anthracene	µg/kg		310 Y	600 Y		1100 Y	620 Y	
Benzo[a]pyrene	µg/kg		320 Y	600 Y		1000 Y	620 Y	
Benzo[b]fluoranthene	µg/kg		320 Y	520 Y		1000 Y	600 Y	
Benzo[ghi]perylene	µg/kg			270 Y		390 Y	260 Y	
Benzo[k]fluoranthene	µg/kg		300 Y	540 Y		830 Y	550 Y	
Carbazole	µg/kg					300 Y		

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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-04-051	WT-CS-04-053	WT-CS-04-055	WT-CS-04-057	WT-CS-04-065	WT-CS-04-067	WT-CS-04-069
	Sample ID	2001261	2001263	2001265	2001267	2001410	2001412	2001414
	Sample Date	11/06/2001	11/06/2001	11/06/2001	11/06/2001	12/03/2001	12/03/2001	12/03/2001
	Sample Time	13:15	13:20	13:25	13:30	11:20	11:26	11:35
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111220-28A	E111220-30A	E111220-32A	E111220-34A	E112023-2A	E112023-4A	E112023-6A
Constituent	Units							
Date PCBs Analyzed	-	11/07/2001	11/07/2001	11/08/2001	11/08/2001			
Date Metals Analyzed	-	11/09/2001	11/09/2001	11/09/2001	11/09/2001	12/05/2001	12/05/2001	12/05/2001
Date Organics Analyzed	-							
Date Physical Analyzed	-		11/07/2001	11/07/2001				
Date Semi-volatile Organics Analyzed	-	11/08/2001	11/08/2001	11/08/2001	11/08/2001	12/04/2001		
Arsenic	mg/kg	2.5 Y	1.4 Y	1.4 Y	2.7 Y			
Barium	mg/kg	35 Y	22 Y	25 Y	28 Y		8.0 Y	
Cadmium	mg/kg	3.0 Y	0.55 Y	0.68 Y	0.18 Y			
Chromium	mg/kg	100 Y	33 Y	32 Y	17 Y	6.7 Y	3.7 Y	
Copper	mg/kg	30 Y	16 Y	24 Y	12 Y	6.5 Y		4.5 Y
Lead	mg/kg	46 Y	24 Y	100 Y	35 Y			2.2 Y
Mercury	mg/kg	0.18 Y	0.15 Y	0.26 Y	0.13 Y	0.068 Y		
Nickel	mg/kg	80 Y	21 Y	29 Y	14 Y	7.0 Y		8.9 Y
Silver	mg/kg	1.3 Y	0.41 Y	0.98 Y	0.19 Y			
Zinc	mg/kg	52 Y	65 Y	50 Y	35 Y	18 Y	6.4 Y	
PCB 1242	µg/kg							
PCB 1254	µg/kg	1100 Y	4600 Y	2200 Y	360 Y			
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg		190 Y	260 Y				
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg			400 Y				
Benzo[a]anthracene	µg/kg	290 Y	520 Y	2000 Y	260 Y			
Benzo[a]pyrene	µg/kg	290 Y	550 Y	1700 Y	250 Y			
Benzo[b]fluoranthene	µg/kg	270 Y	540 Y	1500 Y	240 Y			
Benzo[ghi]perylene	µg/kg		210 Y	570 Y				
Benzo[k]fluoranthene	µg/kg	280 Y	490 Y	1500 Y	250 Y			
Carbazole	µg/kg							

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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-04-069	WT-CS-04-071	WT-CS-04-073	WT-CS-04-075	WT-CS-04-077	WT-CS-04-079	WT-CS-04-080
	Sample ID	2001415	2001417	2001420	2001422	2001424	2001426	2001441
	Sample Date	12/03/2001	12/03/2001	12/03/2001	12/03/2001	12/03/2001	12/03/2001	12/05/2001
	Sample Time	11:40	11:50	12:00	12:05	12:12	12:20	09:45
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E112023-7A	E112023-9A	E112023-12A	E112023-14A	E112023-16A	E112023-18A	E112129-1A
Constituent	Units							
Date PCBs Analyzed	-		12/04/2001		12/03/2001	12/04/2001	12/04/2001	12/05/2001
Date Metals Analyzed	-	12/05/2001	12/05/2001	12/05/2001	12/05/2001	12/05/2001	12/05/2001	
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg	1.8 Y		0.72 Y				
Barium	mg/kg	14 Y	15 Y		20 Y			
Cadmium	mg/kg				0.21 Y			
Chromium	mg/kg	3.8 Y	12 Y		14 Y		6.7 Y	
Copper	mg/kg			4.4 Y			4.5 Y	
Lead	mg/kg			6.8 Y			3.8 Y	
Mercury	mg/kg			0.025 Y	0.025 Y		0.025 Y	
Nickel	mg/kg	9.9 Y		6.8 Y	14 Y			
Silver	mg/kg							
Zinc	mg/kg	14 Y	15 Y		16 Y	15 Y	14 Y	
PCB 1242	µg/kg							
PCB 1254	µg/kg		770 Y		360 Y	68 Y	170 Y	710 Y
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg							
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Carbazole	µg/kg							

Notes: 1. Only Detects Shown
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Table 2
SUMMARY OF ANALYTICAL RESULTS (DETECTS)
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Grab Sampling Data

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	Location ID	WT-CS-04-083	WT-CS-04-083	WT-CS-04-085	WT-CS-04-091			
	Sample ID	2001444	2001445	2001447	2001454			
	Sample Date	12/05/2001	12/05/2001	12/05/2001	12/05/2001			
	Sample Time	09:56	09:59	10:06	12:10			
	Laboratory	PREM	PREM	PREM	PREM			
	Lab. Number	E112129-4A	E112129-5A	E112129-7A	E112129-14A			
Constituent	Units							
Date PCBs Analyzed	-	12/05/2001	12/05/2001	12/05/2001	12/06/2001			
Date Metals Analyzed	-							
Date Organics Analyzed	-							
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-							
Arsenic	mg/kg							
Barium	mg/kg							
Cadmium	mg/kg							
Chromium	mg/kg							
Copper	mg/kg							
Lead	mg/kg							
Mercury	mg/kg							
Nickel	mg/kg							
Silver	mg/kg							
Zinc	mg/kg							
PCB 1242	µg/kg							
PCB 1254	µg/kg	110 Y	220 Y	71 Y	7200 Y			
PCB 1260	µg/kg							
Cyanide	mg/kg							
TPH	mg/kg							
Acenaphthalene	µg/kg							
Acenaphthylene	µg/kg							
Anthracene	µg/kg							
Benzo[a]anthracene	µg/kg							
Benzo[a]pyrene	µg/kg							
Benzo[b]fluoranthene	µg/kg							
Benzo[ghi]perylene	µg/kg							
Benzo[k]fluoranthene	µg/kg							
Carbazole	µg/kg							

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Table 3
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling Data

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Sample Information					Analysis Information								
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WT-CS-02-008	2001193	10/26/01			SSC						X		
WT-CS-02-009	2001194	10/26/01			SSC						X		
WT-CS-02-010	2001195	10/26/01			SSC						X		
WT-CS-02-011	2001196	10/26/01			SSC						X		
WT-CS-02-012	2001197	10/26/01			SSC						X		
WT-CS-02-013	2001198	10/26/01			SSC						X		
WT-CS-02-014	2001199	10/26/01			SSC						X		
WT-CS-02-014	2001200	10/26/01			SSC						X		
WT-CS-02-017	2001286	11/ 9/01			SSC						X		
WT-CS-02-019	2001288	11/ 9/01			SSC						X		
WT-CS-02-021	2001290	11/ 9/01			SSC						X		
WT-CS-02-022	2001291	11/ 9/01			SSC						X		
WT-CS-02-022	2001292	11/ 9/01			SSC						X		
WT-CS-02-024	2001294	11/ 9/01			SSC						X		
WT-CS-02-026	2001297	11/ 9/01			SSC						X		
WT-CS-02-028	2001299	11/ 9/01			SSC						X		
WT-CS-02-029	2001304	11/13/01			SSC						X		
WT-CS-02-031	2001306	11/13/01			SSC						X		
WT-CS-02-031	2001307	11/13/01			SSC						X		
WT-CS-02-033	2001367	11/28/01			SSC						x		
WT-CS-02-035	2001369	11/28/01			SSC						X		
WT-CS-02-037	2001371	11/28/01			SSC						x		
WT-CS-02-037	2001372	11/28/01			SSC						x		
WT-CS-02-039	2001374	11/28/01			SSC						x		
WT-CS-02-041	2001376	11/28/01			SSC						X		
WT-CS-02-043	2001379	11/28/01			SSC						X		
WT-CS-02-045	2001381	11/28/01			SSC						X		
WT-CS-02-047	2001383	11/28/01			SSC						X		
WT-CS-02-049	2001386	11/29/01			SSC						X		
WT-CS-02-051	2001388	11/29/01			SSC						X		
WT-CS-02-051	2001389	11/29/01			SSC						X		

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected

2. Printed on 12/10/01



Table 3
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling Data

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Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WT-CS-02-053	2001391	11/29/01			SSC						X		
WT-CS-02-055	2001394	11/29/01			SSC						X		
WT-CS-02-057	2001396	11/29/01			SSC						X		
WT-CS-03-003	2001203	10/26/01			SSC						X		
WT-CS-03-004	2001204	10/26/01			SSC						x		
WT-CS-03-005	2001205	10/26/01			SSC						X		
WT-CS-03-006	2001206	10/26/01			SSC						X		
WT-CS-03-007	2001276	11/ 9/01			SSC						x		
WT-CS-03-009	2001278	11/ 9/01			SSC						x		
WT-CS-03-011	2001280	11/ 9/01			SSC						X		
WT-CS-03-013	2001282	11/ 9/01			SSC						x		
WT-CS-03-014	2001283	11/ 9/01			SSC						X		
WT-CS-03-019	2001322	11/27/01			SSC						X		
WT-CS-03-021	2001324	11/27/01			SSC						X		
WT-CS-03-023	2001326	11/27/01			SSC						x		
WT-CS-03-025	2001328	11/27/01			SSC						x		
WT-CS-03-027	2001337	11/27/01			SSC						x		
WT-CS-03-029	2001339	11/27/01			SSC						X		
WT-CS-03-031	2001341	11/27/01			SSC						X		
WT-CS-03-031	2001342	11/27/01			SSC						X		
WT-CS-03-033	2001344	11/27/01			SSC						x		
WT-CS-03-037	2001361	11/29/01			SSC						X		
WT-CS-03-039	2001363	11/29/01			SSC						X		
WT-CS-03-041	2001365	11/29/01			SSC						X		
WT-CS-03-044	2001434	12/ 4/01			SSC						x		
WT-CS-03-046	2001436	12/ 4/01			SSC						x		
WT-CS-04-001	2001207	10/30/01			SSC						x		
WT-CS-04-002	2001208	10/30/01			SSC						x		
WT-CS-04-004	2001210	10/30/01			SSC						X		
WT-CS-04-005	2001211	10/30/01			SSC						X		
WT-CS-04-006	2001212	10/30/01			SSC						X		
WT-CS-04-007	2001213	10/30/01			SSC						x		

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected

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Table 3
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling Data

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Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WT-CS-04-008	2001214	10/30/01			SSC						X		
WT-CS-04-009	2001215	10/30/01			SSC						x		
WT-CS-04-010	2001216	10/30/01			SSC						X		
WT-CS-04-010	2001217	10/30/01			SSC						X		
WT-CS-04-011	2001218	10/30/01			SSC						X		
WT-CS-04-012	2001219	10/30/01			SSC						X		
WT-CS-04-013	2001220	10/30/01			SSC						X		
WT-CS-04-014	2001221	11/ 5/01			SSC						x		
WT-CS-04-015	2001222	11/ 5/01			SSC						X		
WT-CS-04-015	2001223	11/ 5/01			SSC						X		
WT-CS-04-016	2001224	11/ 5/01			SSC						X		
WT-CS-04-017	2001225	11/ 5/01			SSC						X		
WT-CS-04-018	2001226	11/ 5/01			SSC						X		
WT-CS-04-019	2001227	11/ 5/01			SSC						X		
WT-CS-04-020	2001228	11/ 5/01			SSC						X		
WT-CS-04-021	2001229	11/ 5/01			SSC						X		
WT-CS-04-022	2001230	11/ 5/01			SSC						X		
WT-CS-04-023	2001231	11/ 5/01			SSC						X		
WT-CS-04-024	2001232	11/ 5/01			SSC						X		
WT-CS-04-025	2001233	11/ 5/01			SSC						X		
WT-CS-04-026	2001234	11/ 6/01			SSC						x		
WT-CS-04-028	2001236	11/ 6/01			SSC						X		
WT-CS-04-030	2001238	11/ 6/01			SSC						x		
WT-CS-04-032	2001240	11/ 6/01			SSC						X		
WT-CS-04-034	2001242	11/ 6/01			SSC						X		
WT-CS-04-034	2001244	11/ 6/01			SSC						X		
WT-CS-04-036	2001246	11/ 6/01			SSC						X		
WT-CS-04-038	2001248	11/ 6/01			SSC						X		
WT-CS-04-039	2001249	11/ 6/01			SSC						X		
WT-CS-04-040	2001250	11/ 6/01			SSC						X		
WT-CS-04-042	2001252	11/ 6/01			SSC						X		
WT-CS-04-044	2001254	11/ 6/01			SSC						X		

Notes: 1. Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE; Capitalized - at least one analyte detected
2. Printed on 12/10/01



Table 3
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Pratt & Whitney, East Hartford, CT - Willow Brook Pond: Confirmatory Soil Composite Sampling Data

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Sample Information						Analysis Information							
Location ID	Sample ID	Sample Date	From (ft)	To (ft)	Class	Portable GC	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous
WT-CS-04-046	2001256	11/ 6/01			SSC						X		
WT-CS-04-048	2001258	11/ 6/01			SSC						X		
WT-CS-04-050	2001260	11/ 6/01			SSC						X		
WT-CS-04-052	2001262	11/ 6/01			SSC						X		
WT-CS-04-054	2001264	11/ 6/01			SSC						X		
WT-CS-04-056	2001266	11/ 6/01			SSC						X		
WT-CS-04-058	2001268	11/ 6/01			SSC						X		
WT-CS-04-059	2001310	11/14/01			SSC						X		
WT-CS-04-060	2001311	11/14/01			SSC						x		
WT-CS-04-061	2001312	11/14/01			SSC						X		
WT-CS-04-061	2001314	11/14/01			SSC						X		
WT-CS-04-062	2001313	11/14/01			SSC						X		
WT-CS-04-064	2001409	12/ 3/01			SSC						x		
WT-CS-04-066	2001411	12/ 3/01			SSC						X		
WT-CS-04-068	2001413	12/ 3/01			SSC						X		
WT-CS-04-070	2001416	12/ 3/01			SSC						X		
WT-CS-04-072	2001418	12/ 3/01			SSC						X		
WT-CS-04-072	2001419	12/ 3/01			SSC						X		
WT-CS-04-074	2001421	12/ 3/01			SSC						X		
WT-CS-04-076	2001423	12/ 3/01			SSC						X		
WT-CS-04-078	2001425	12/ 3/01			SSC						X		
WT-CS-04-082	2001443	12/ 5/01			SSC						X		
WT-CS-04-084	2001446	12/ 5/01			SSC						x		
WT-CS-04-086	2001448	12/ 5/01			SSC						X		
WT-CS-04-086	2001449	12/ 5/01			SSC						X		
WT-CS-04-088	2001451	12/ 5/01			SSC						X		
WT-CS-04-090	2001453	12/ 5/01			SSC						X		
WT-CS-04-092	2001455	12/ 5/01			SSC						X		

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Notes: 1. Only Detects Shown
2. Printed on 12/10/01



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**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 4

**Oil/Water Separator and Upper Pond
Dewatering Wastewater Analytical Data**

Page 1 of 1

Notes: 1. Printed on 12/10/01



Table 2
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Upper Pond/Oil Water Separator - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002
	Sample ID	2003012	2003012	2003013	2003013	2003013	2003013	2003014
	Sample Date	10/12/2001	10/12/2001	10/19/2001	10/19/2001	10/19/2001	10/19/2001	10/25/2001
	Sample Time	14:00	14:00	11:20	11:20	11:20	11:20	06:55
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E110653-1A	E110653-1B	E110922-1A	E110922-1B	E110922-1C	E110922-1D	E110C29-1A
Constituent	Units							
Date PCBs Analyzed	-	10/15/2001				10/24/2001		
Date Metals Analyzed	-				10/26/2001			
Date Organics Analyzed	-		10/15/2001				10/23/2001	
Date Physical Analyzed	-			10/19/2001				10/26/2001
Copper	mg/l				<0.010 U			
Lead	mg/l				<0.0040 U			
Zinc	mg/l				0.32 Y			
PCB 1016	µg/l	<0.41 U				<0.45 U		
PCB 1221	µg/l	<0.41 U				<0.45 U		
PCB 1232	µg/l	<0.41 U				<0.45 U		
PCB 1242	µg/l	<0.41 U				<0.45 U		
PCB 1248	µg/l	<0.41 U				<0.45 U		
PCB 1254	µg/l	<0.41 U				<0.45 U		
PCB 1260	µg/l	<0.41 U				<0.45 U		
pH	ph un			6.2 Y				6.3 Y
1,1,1-trichloroethane	µg/l		<5.0 U				<5.0 U	
1,1,2,2-tetrachloroethane	µg/l		<5.0 U				<5.0 U	
1,1,2-trichloroethane	µg/l		<5.0 U				<5.0 U	
1,1-dichloroethane	µg/l		<5.0 U				<5.0 U	
1,1-Dichloroethylene	µg/l		<5.0 U				<5.0 U	
o-Dichlorobenzene	µg/l		<5.0 U				<5.0 U	
1,2-dichloroethane	µg/l		<5.0 U				<5.0 U	
Propylene Dichloride	µg/l		<5.0 U				<5.0 U	
m-Dichlorobenzene	µg/l		<5.0 U				<5.0 U	
p-Dichlorobenzene	µg/l		<5.0 U				<5.0 U	
2-chloroethyl Vinyl Ether	µg/l		<5.0 U				<5.0 U	
Acrolein	µg/l		<20 U				<20 U	
Acrylonitrile	µg/l		<20 U				<20 U	
Benzene	µg/l		<5.0 U				<5.0 U	

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Notes: 1. Printed on 12/10/01

Table 2
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Upper Pond/Oil Water Separator - Dewatering Wastewater Compliance Monitoring

Page 3 of 4

	Location ID	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002	WT-EW-02-002
	Sample ID	2003014	2003014	2003014	2003015	2003015	2003015	2003015
	Sample Date	10/25/2001	10/25/2001	10/25/2001	11/02/2001	11/02/2001	11/02/2001	11/02/2001
	Sample Time	06:55	06:55	06:55	06:55	06:55	06:55	06:55
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E110C29-1B	E110C29-1C	E110C29-1D	E111073-1A	E111073-1B	E111073-1C	E111073-1D
Constituent	Units							
Date PCBs Analyzed	-		10/30/2001				11/07/2001	
Date Metals Analyzed	-	11/01/2001				11/07/2001		
Date Organics Analyzed	-			10/26/2001				11/02/2001
Date Physical Analyzed	-				11/02/2001			
Copper	mg/l	<0.010 U				<0.010 U		
Lead	mg/l	<0.0040 U				<0.0040 U		
Zinc	mg/l	0.30 Y				0.20 Y		
PCB 1016	µg/l		<0.45 U				<0.40 U	
PCB 1221	µg/l		<0.45 U				<0.40 U	
PCB 1232	µg/l		<0.45 U				<0.40 U	
PCB 1242	µg/l		<0.45 U				<0.40 U	
PCB 1248	µg/l		<0.45 U				0.88 Y	
PCB 1254	µg/l		<0.45 U				<0.40 U	
PCB 1260	µg/l		<0.45 U				<0.40 U	
pH	ph un				6.3 Y			
1,1,1-trichloroethane	µg/l			<5.0 U				9.8 Y
1,1,2,2-tetrachloroethane	µg/l			<5.0 U				<5.0 U
1,1,2-trichloroethane	µg/l			<5.0 U				<5.0 U
1,1-dichloroethane	µg/l			<5.0 U				<5.0 U
1,1-Dichloroethylene	µg/l			<5.0 U				<5.0 U
o-Dichlorobenzene	µg/l			<5.0 U				<5.0 U
1,2-dichloroethane	µg/l			<5.0 U				<5.0 U
Propylene Dichloride	µg/l			<5.0 U				<5.0 U
m-Dichlorobenzene	µg/l			<5.0 U				<5.0 U
p-Dichlorobenzene	µg/l			<5.0 U				<5.0 U
2-chloroethyl Vinyl Ether	µg/l			<5.0 U				<5.0 U
Acrolein	µg/l			<20 U				<20 U
Acrylonitrile	µg/l			<20 U				<20 U
Benzene	µg/l			<5.0 U				<5.0 U

Notes: 1. Printed on 12/10/01

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Notes: 1. Printed on 12/10/01

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 5

Lower Pond Dewatering Wastewater Analytical Data

Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Raw Water Screening

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	Location ID	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001
	Sample ID	2003016	2003016	2003016	2003016	2003017	2003017	2003017
	Sample Date	11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001
Time Sampled	Sample Time	1722 Y	15:40	15:40	15:40	15:40	15:40	15:40
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111354-1A	E111354-1B	E111354-1C	E111354-1D	E111355-1A	E111355-1B	E111355-1C
Constituent	Units							
Date PCBs Analyzed	-			11/08/2001				
Date Metals Analyzed	-	11/08/2001	11/09/2001					11/09/2001
Date Organics Analyzed	-				11/09/2001		11/12/2001	
Date Physical Analyzed	-	11/08/2001				11/12/2001		
Date Semi-volatile Organics Analyzed	-							
Aluminum	mg/l							1.2 Y
Arsenic	mg/l							<0.010 U
Boron	mg/l							0.27 Y
Cadmium	mg/l							<0.0020 U
Chromium, Hexavalent	mg/l	<0.050 U						
Chromium	mg/l							<0.010 U
Copper	mg/l		0.012 Y					
Iron	mg/l							5.4 Y
Lead	mg/l		0.0078 Y					
Magnesium	mg/l							10 Y
Mercury	mg/l							<0.00020 U
Nickel	mg/l							0.047 Y
Silver	mg/l							<0.0020 U
Titanium	mg/l							0.093 Y
Zinc	mg/l		1.4 Y					
PCB 1016	µg/l			<0.40 U				
PCB 1221	µg/l			<0.40 U				
PCB 1232	µg/l			<0.40 U				
PCB 1242	µg/l			<0.40 U				
PCB 1248	µg/l			<0.40 U				
PCB 1254	µg/l			<0.40 U				
PCB 1260	µg/l			<0.40 U				
COD	µg/L						54000 Y	
Cyanide	mg/l							

Notes: 1. Printed on 12/10/01



Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Raw Water Screening

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	Location ID	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001
	Sample ID	2003016	2003016	2003016	2003016	2003017	2003017	2003017
	Sample Date	11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001	11/08/2001
Time Sampled	Sample Time	1722 Y	15:40	15:40	15:40	15:40	15:40	15:40
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111354-1A	E111354-1B	E111354-1C	E111354-1D	E111355-1A	E111355-1B	E111355-1C
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l							
Extract. Petroleum Hydrocarbons EPA 1664	mg/l							
Fluoride	mg/l					0.34 Y		
pH	ph un	6.8 Y						
p-Chloro-m-cresol	µg/l							
1,1,1-trichloroethane	µg/l				<5.0 U			
1,1,2,2-tetrachloroethane	µg/l				<5.0 U			
1,1,2-trichloroethane	µg/l				<5.0 U			
1,1-dichloroethane	µg/l				7.1 Y			
1,1-Dichloroethylene	µg/l				<5.0 U			
o-Dichlorobenzene	µg/l				<5.0 U			
1,2-dichloroethane	µg/l				<5.0 U			
Propylene Dichloride	µg/l				<5.0 U			
m-Dichlorobenzene	µg/l				<5.0 U			
p-Dichlorobenzene	µg/l				<5.0 U			
2-chloroethyl Vinyl Ether	µg/l				<5.0 U			
Acrolein	µg/l				<20 U			
Acrylonitrile	µg/l				<20 U			
Benzene	µg/l				<5.0 U			
Bromodichloromethane	µg/l				<5.0 U			
Bromoform	µg/l				<5.0 U			
Bromomethane	µg/l				<5.0 U			
Carbon Tetrachloride	µg/l				<5.0 U			
Chlorobenzene	µg/l				<5.0 U			
Chloroethane	µg/l				<5.0 U			
Chloroform	µg/l				<5.0 U			
Chloromethane	µg/l				<5.0 U			
Dibromochloromethane	µg/l				<5.0 U			
Ethyl Benzene	µg/l				<5.0 U			

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Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Raw Water Screening

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	Location ID	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001			
	Sample ID	2003017	2003017	2003017	2003024			
	Sample Date	11/08/2001	11/08/2001	11/08/2001	11/26/2001			
Time Sampled	Sample Time	15:40	15:40	15:40				
	Laboratory	PREM	PREM	PREM	LEA			
	Lab. Number	E111355-1D	E111355-1E	E111355-1F	35052-1304			
Constituent	Units							
Date PCBs Analyzed	-							
Date Metals Analyzed	-							
Date Organics Analyzed	-				11/26/2001			
Date Physical Analyzed	-	11/12/2001		11/12/2001				
Date Semi-volatile Organics Analyzed	-		11/09/2001					
Aluminum	mg/l							
Arsenic	mg/l							
Boron	mg/l							
Cadmium	mg/l							
Chromium, Hexavalent	mg/l							
Chromium	mg/l							
Copper	mg/l							
Iron	mg/l							
Lead	mg/l							
Magnesium	mg/l							
Mercury	mg/l							
Nickel	mg/l							
Silver	mg/l							
Titanium	mg/l							
Zinc	mg/l							
PCB 1016	µg/l							
PCB 1221	µg/l							
PCB 1232	µg/l							
PCB 1242	µg/l							
PCB 1248	µg/l							
PCB 1254	µg/l							
PCB 1260	µg/l							
COD	µg/L							
Cyanide	mg/l	0.019 Y						

Notes: 1. Printed on 12/10/01



Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Raw Water Screening

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	Location ID	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001	WT-EW-05-001			
	Sample ID	2003017	2003017	2003017	2003024			
	Sample Date	11/08/2001	11/08/2001	11/08/2001	11/26/2001			
Time Sampled	Sample Time	15:40	15:40	15:40				
	Laboratory	PREM	PREM	PREM	LEA			
	Lab. Number	E111355-1D	E111355-1E	E111355-1F	35052-1304			
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l	<0.010 U						
Extract. Petroleum Hydrocarbons EPA 1664	mg/l			<2.0 U				
Fluoride	mg/l							
pH	ph un							
p-Chloro-m-cresol	µg/l		<5.0 U					
1,1,1-trichloroethane	µg/l							
1,1,2,2-tetrachloroethane	µg/l							
1,1,2-trichloroethane	µg/l							
1,1-dichloroethane	µg/l							
1,1-Dichloroethylene	µg/l							
o-Dichlorobenzene	µg/l							
1,2-dichloroethane	µg/l							
Propylene Dichloride	µg/l							
m-Dichlorobenzene	µg/l							
p-Dichlorobenzene	µg/l							
2-chloroethyl Vinyl Ether	µg/l							
Acrolein	µg/l							
Acrylonitrile	µg/l							
Benzene	µg/l							
Bromodichloromethane	µg/l							
Bromoform	µg/l							
Bromomethane	µg/l							
Carbon Tetrachloride	µg/l							
Chlorobenzene	µg/l							
Chloroethane	µg/l							
Chloroform	µg/l							
Chloromethane	µg/l							
Dibromochloromethane	µg/l							
Ethyl Benzene	µg/l							

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Notes: 1. Printed on 12/10/01

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Notes: 1. Printed on 12/11/01



Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002
	Sample ID	2003025	2003025	2003025	2003025	2003026	2003026	2003026
	Sample Date	11/26/2001	11/26/2001	11/26/2001	11/26/2001	11/26/2001	11/26/2001	11/26/2001
Time Sampled	Sample Time	1425 Y	16:15	16:15	16:15	16:15	16:15	16:15
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111A08-1A	E111A08-1B	E111A08-1C	E111A08-1D	E111A09-1A	E111A09-1B	E111A09-1C
Constituent	Units							
Date PCBs Analyzed	-			11/27/2001				
Date Metals Analyzed	-		11/27/2001					11/27/2001
Date Organics Analyzed	-	11/27/2001			11/27/2001		11/27/2001	
Date Physical Analyzed	-	11/27/2001				11/28/2001		
Date Semi-volatile Organics Analyzed	-							
Aluminum	mg/l							2.2 Y
Arsenic	mg/l							<0.010 U
Boron	mg/l							0.33 Y
Cadmium	mg/l							<0.0020 U
Chromium	mg/l							<0.010 U
Copper	mg/l		<0.010 U					
Iron	mg/l							6.8 Y
Lead	mg/l		0.0066 Y					
Magnesium	mg/l							12 Y
Mercury	mg/l							<0.00020 U
Nickel	mg/l							0.056 Y
Silver	mg/l							<0.0020 U
Titanium	mg/l							0.20 Y
Zinc	mg/l		1.3 Y					
PCB 1016	µg/l			<0.40 U				
PCB 1221	µg/l			<0.40 U				
PCB 1232	µg/l			<0.40 U				
PCB 1242	µg/l			<0.40 U				
PCB 1248	µg/l			<0.40 U				
PCB 1254	µg/l			<0.40 U				
PCB 1260	µg/l			<0.40 U				
COD	µg/L						33000 Y	
Chromic Oxide	µg/L	<50 U						
Cyanide	mg/l							

Notes: 1. Printed on 12/11/01

Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002
	Sample ID	2003025	2003025	2003025	2003025	2003026	2003026	2003026
	Sample Date	11/26/2001	11/26/2001	11/26/2001	11/26/2001	11/26/2001	11/26/2001	11/26/2001
Time Sampled	Sample Time	1425 Y	16:15	16:15	16:15	16:15	16:15	16:15
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111A08-1A	E111A08-1B	E111A08-1C	E111A08-1D	E111A09-1A	E111A09-1B	E111A09-1C
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l							
Extract. Petroleum Hydrocarbons EPA 1664	mg/l							
Fluoride	mg/l					0.23 Y		
pH	ph un	7.6 Y						
p-Chloro-m-cresol	µg/l							
1,1,1-trichloroethane	µg/l				<5.0 U			
1,1,2,2-tetrachloroethane	µg/l				<5.0 U			
1,1,2-trichloroethane	µg/l				<5.0 U			
1,1-dichloroethane	µg/l				<5.0 U			
1,1-Dichloroethylene	µg/l				<5.0 U			
o-Dichlorobenzene	µg/l				<5.0 U			
1,2-dichloroethane	µg/l				<5.0 U			
Propylene Dichloride	µg/l				<5.0 U			
m-Dichlorobenzene	µg/l				<5.0 U			
p-Dichlorobenzene	µg/l				<5.0 U			
2-chloroethyl Vinyl Ether	µg/l				<5.0 U			
Acrolein	µg/l				<20 U			
Acrylonitrile	µg/l				<20 U			
Benzene	µg/l				<5.0 U			
Bromodichloromethane	µg/l				<5.0 U			
Bromoform	µg/l				<5.0 U			
Bromomethane	µg/l				<5.0 U			
Carbon Tetrachloride	µg/l				<5.0 U			
Chlorobenzene	µg/l				<5.0 U			
Chloroethane	µg/l				<5.0 U			
Chloroform	µg/l				<5.0 U			
Chloromethane	µg/l				<5.0 U			
Dibromochloromethane	µg/l				<5.0 U			
Ethyl Benzene	µg/l				<5.0 U			

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Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002
	Sample ID	2003026	2003026	2003026	2003027	2003027	2003027	2003029
	Sample Date	11/26/2001	11/26/2001	11/26/2001	11/27/2001	11/27/2001	11/27/2001	12/04/2001
Time Sampled	Sample Time	16:15	16:15	16:15	10:15	10:15	10:15	12:10
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111A09-1D	E111A09-1E	E111A09-1F	E111A86-1A	E111A86-1B	E111A86-1C	E112073-1A
Constituent	Units							
Date PCBs Analyzed	-				11/28/2001			
Date Metals Analyzed	-					11/28/2001		
Date Organics Analyzed	-						11/28/2001	
Date Physical Analyzed	-	11/28/2001		11/29/2001	11/28/2001			12/04/2001
Date Semi-volatile Organics Analyzed	-		11/27/2001					
Aluminum	mg/l							
Arsenic	mg/l							
Boron	mg/l							
Cadmium	mg/l							
Chromium	mg/l							
Copper	mg/l					<0.010 U		
Iron	mg/l							
Lead	mg/l					<0.0040 U		
Magnesium	mg/l							
Mercury	mg/l							
Nickel	mg/l							
Silver	mg/l							
Titanium	mg/l							
Zinc	mg/l					0.56 Y		
PCB 1016	µg/l				<0.40 U			
PCB 1221	µg/l				<0.40 U			
PCB 1232	µg/l				<0.40 U			
PCB 1242	µg/l				<0.40 U			
PCB 1248	µg/l				<0.40 U			
PCB 1254	µg/l				<0.40 U			
PCB 1260	µg/l				<0.40 U			
COD	µg/L							
Chromic Oxide	µg/L							
Cyanide	mg/l	<0.010 U						

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Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002
	Sample ID	2003026	2003026	2003026	2003027	2003027	2003027	2003029
	Sample Date	11/26/2001	11/26/2001	11/26/2001	11/27/2001	11/27/2001	11/27/2001	12/04/2001
Time Sampled	Sample Time	16:15	16:15	16:15	10:15	10:15	10:15	12:10
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111A09-1D	E111A09-1E	E111A09-1F	E111A86-1A	E111A86-1B	E111A86-1C	E112073-1A
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l	<0.010 U						
Extract. Petroleum Hydrocarbons EPA 1664	mg/l			<2.0 U				
Fluoride	mg/l							
pH	ph un				7.9 Y			7.7 Y
p-Chloro-m-cresol	µg/l		<5.0 U					
1,1,1-trichloroethane	µg/l						<5.0 U	
1,1,2,2-tetrachloroethane	µg/l						<5.0 U	
1,1,2-trichloroethane	µg/l						<5.0 U	
1,1-dichloroethane	µg/l						<5.0 U	
1,1-Dichloroethylene	µg/l						<5.0 U	
o-Dichlorobenzene	µg/l						<5.0 U	
1,2-dichloroethane	µg/l						<5.0 U	
Propylene Dichloride	µg/l						<5.0 U	
m-Dichlorobenzene	µg/l						<5.0 U	
p-Dichlorobenzene	µg/l						<5.0 U	
2-chloroethyl Vinyl Ether	µg/l						<5.0 U	
Acrolein	µg/l						<20 U	
Acrylonitrile	µg/l						<20 U	
Benzene	µg/l						<5.0 U	
Bromodichloromethane	µg/l						<5.0 U	
Bromoform	µg/l						<5.0 U	
Bromomethane	µg/l						<5.0 U	
Carbon Tetrachloride	µg/l						<5.0 U	
Chlorobenzene	µg/l						<5.0 U	
Chloroethane	µg/l						<5.0 U	
Chloroform	µg/l						<5.0 U	
Chloromethane	µg/l						<5.0 U	
Dibromochloromethane	µg/l						<5.0 U	
Ethyl Benzene	µg/l						<5.0 U	

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Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002				
	Sample ID	2003029	2003029	2003029				
	Sample Date	12/04/2001	12/04/2001	12/04/2001				
Time Sampled	Sample Time	12:10	12:10	12:10				
	Laboratory	PREM	PREM	PREM				
	Lab. Number	E112073-1B	E112073-1C	E112073-1D				
Constituent	Units							
Date PCBs Analyzed	-		12/05/2001					
Date Metals Analyzed	-	12/07/2001						
Date Organics Analyzed	-			12/04/2001				
Date Physical Analyzed	-							
Date Semi-volatile Organics Analyzed	-							
Aluminum	mg/l							
Arsenic	mg/l							
Boron	mg/l							
Cadmium	mg/l							
Chromium	mg/l							
Copper	mg/l	<0.010 U						
Iron	mg/l							
Lead	mg/l	<0.0040 U						
Magnesium	mg/l							
Mercury	mg/l							
Nickel	mg/l							
Silver	mg/l							
Titanium	mg/l							
Zinc	mg/l	0.28 Y						
PCB 1016	µg/l		<0.40 U					
PCB 1221	µg/l		<0.40 U					
PCB 1232	µg/l		<0.40 U					
PCB 1242	µg/l		<0.40 U					
PCB 1248	µg/l		<0.40 U					
PCB 1254	µg/l		<0.40 U					
PCB 1260	µg/l		<0.40 U					
COD	µg/L							
Chromic Oxide	µg/L							
Cyanide	mg/l							

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Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Lower Pond - Dewatering Wastewater Compliance Monitoring

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	Location ID	WT-EW-05-002	WT-EW-05-002	WT-EW-05-002				
	Sample ID	2003029	2003029	2003029				
	Sample Date	12/04/2001	12/04/2001	12/04/2001				
Time Sampled	Sample Time	12:10	12:10	12:10				
	Laboratory	PREM	PREM	PREM				
	Lab. Number	E112073-1B	E112073-1C	E112073-1D				
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l							
Extract. Petroleum Hydrocarbons EPA 1664	mg/l							
Fluoride	mg/l							
pH	ph un							
p-Chloro-m-cresol	µg/l							
1,1,1-trichloroethane	µg/l			<5.0 U				
1,1,2,2-tetrachloroethane	µg/l			<5.0 U				
1,1,2-trichloroethane	µg/l			<5.0 U				
1,1-dichloroethane	µg/l			<5.0 U				
1,1-Dichloroethylene	µg/l			<5.0 U				
o-Dichlorobenzene	µg/l			<5.0 U				
1,2-dichloroethane	µg/l			<5.0 U				
Propylene Dichloride	µg/l			<5.0 U				
m-Dichlorobenzene	µg/l			<5.0 U				
p-Dichlorobenzene	µg/l			<5.0 U				
2-chloroethyl Vinyl Ether	µg/l			<5.0 U				
Acrolein	µg/l			<20 U				
Acrylonitrile	µg/l			<20 U				
Benzene	µg/l			<5.0 U				
Bromodichloromethane	µg/l			<5.0 U				
Bromoform	µg/l			<5.0 U				
Bromomethane	µg/l			<5.0 U				
Carbon Tetrachloride	µg/l			<5.0 U				
Chlorobenzene	µg/l			<5.0 U				
Chloroethane	µg/l			<5.0 U				
Chloroform	µg/l			<5.0 U				
Chloromethane	µg/l			<5.0 U				
Dibromochloromethane	µg/l			<5.0 U				
Ethyl Benzene	µg/l			<5.0 U				

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**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 6

Wetland Dewatering Wastewater Analytical Data

Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Wetland - Dewatering Raw Water Screening

Page 1 of 6

	Location ID	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001
	Sample ID	2003018	2003018	2003018	2003018	2003019	2003019	2003019
	Sample Date	11/15/2001	11/15/2001	11/15/2001	11/15/2001	11/15/2001	11/15/2001	11/15/2001
Time Sampled	Sample Time	1615 Y	21:10	21:10	21:10	21:10	21:10	21:10
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111676-1A	E111676-1B	E111676-1C	E111676-1D	E111675-1A	E111675-1B	E111675-1C
Constituent	Units							
Date PCBs Analyzed	-			11/19/2001				
Date Metals Analyzed	-		11/16/2001					11/16/2001
Date Organics Analyzed	-	11/16/2001			11/16/2001		11/19/2001	
Date Physical Analyzed	-	11/16/2001				11/20/2001		
Date Semi-volatile Organics Analyzed	-							
Aluminum	mg/l							0.44 Y
Arsenic	mg/l							<0.010 U
Boron	mg/l							0.91 Y
Cadmium	mg/l							<0.0020 U
Chromium	mg/l							<0.010 U
Copper	mg/l		0.078 Y					
Iron	mg/l							2.2 Y
Lead	mg/l		<0.0040 U					
Magnesium	mg/l							12 Y
Mercury	mg/l							<0.00020 U
Nickel	mg/l							0.43 Y
Silver	mg/l							0.0054 Y
Titanium	mg/l							0.039 Y
Zinc	mg/l		0.026 Y					
PCB 1016	µg/l			<0.40 U				
PCB 1221	µg/l			<0.40 U				
PCB 1232	µg/l			<0.40 U				
PCB 1242	µg/l			<0.40 U				
PCB 1248	µg/l			<0.40 U				
PCB 1254	µg/l			<0.40 U				
PCB 1260	µg/l			<0.40 U				
COD	µg/L						180000 Y	
Chromic Oxide	µg/L	<50 U						
Cyanide	mg/l							

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Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Wetland - Dewatering Raw Water Screening

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	Location ID	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001
	Sample ID	2003018	2003018	2003018	2003018	2003019	2003019	2003019
	Sample Date	11/15/2001	11/15/2001	11/15/2001	11/15/2001	11/15/2001	11/15/2001	11/15/2001
Time Sampled	Sample Time	1615 Y	21:10	21:10	21:10	21:10	21:10	21:10
	Laboratory	PREM	PREM	PREM	PREM	PREM	PREM	PREM
	Lab. Number	E111676-1A	E111676-1B	E111676-1C	E111676-1D	E111675-1A	E111675-1B	E111675-1C
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l							
Extract. Petroleum Hydrocarbons EPA 1664	mg/l							
Fluoride	mg/l					0.25 Y		
pH	ph un	7.6 Y						
p-Chloro-m-cresol	µg/l							
1,1,1-trichloroethane	µg/l				<5.0 U			
1,1,2,2-tetrachloroethane	µg/l				<5.0 U			
1,1,2-trichloroethane	µg/l				<5.0 U			
1,1-dichloroethane	µg/l				<5.0 U			
1,1-Dichloroethylene	µg/l				<5.0 U			
o-Dichlorobenzene	µg/l				<5.0 U			
1,2-dichloroethane	µg/l				<5.0 U			
Propylene Dichloride	µg/l				<5.0 U			
m-Dichlorobenzene	µg/l				<5.0 U			
p-Dichlorobenzene	µg/l				<5.0 U			
2-chloroethyl Vinyl Ether	µg/l				<5.0 U			
Acrolein	µg/l				<20 U			
Acrylonitrile	µg/l				<20 U			
Benzene	µg/l				<5.0 U			
Bromodichloromethane	µg/l				<5.0 U			
Bromoform	µg/l				<5.0 U			
Bromomethane	µg/l				<5.0 U			
Carbon Tetrachloride	µg/l				<5.0 U			
Chlorobenzene	µg/l				<5.0 U			
Chloroethane	µg/l				<5.0 U			
Chloroform	µg/l				14 Y			
Chloromethane	µg/l				<5.0 U			
Dibromochloromethane	µg/l				<5.0 U			
Ethyl Benzene	µg/l				<5.0 U			

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Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Wetland - Dewatering Raw Water Screening

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	Location ID	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001			
	Sample ID	2003019	2003019	2003019	2002090			
	Sample Date	11/15/2001	11/15/2001	11/15/2001	12/03/2001			
Time Sampled	Sample Time	21:10	21:10	21:10	14:30			
	Laboratory	PREM	PREM	PREM	LEA			
	Lab. Number	E111675-1D	E111675-1E	E111675-1F	35052-1319			
Constituent	Units							
Date PCBs Analyzed	-							
Date Metals Analyzed	-							
Date Organics Analyzed	-				12/03/2001			
Date Physical Analyzed	-	11/19/2001		11/20/2001				
Date Semi-volatile Organics Analyzed	-		11/19/2001					
Aluminum	mg/l							
Arsenic	mg/l							
Boron	mg/l							
Cadmium	mg/l							
Chromium	mg/l							
Copper	mg/l							
Iron	mg/l							
Lead	mg/l							
Magnesium	mg/l							
Mercury	mg/l							
Nickel	mg/l							
Silver	mg/l							
Titanium	mg/l							
Zinc	mg/l							
PCB 1016	µg/l							
PCB 1221	µg/l							
PCB 1232	µg/l							
PCB 1242	µg/l							
PCB 1248	µg/l							
PCB 1254	µg/l							
PCB 1260	µg/l							
COD	µg/L							
Chromic Oxide	µg/L							
Cyanide	mg/l	0.073 Y						

Notes: 1. Printed on 12/11/01

Table 1
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Wetland - Dewatering Raw Water Screening

Page 5 of 6

	Location ID	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001	WT-EW-14-001			
	Sample ID	2003019	2003019	2003019	2002090			
	Sample Date	11/15/2001	11/15/2001	11/15/2001	12/03/2001			
Time Sampled	Sample Time	21:10	21:10	21:10	14:30			
	Laboratory	PREM	PREM	PREM	LEA			
	Lab. Number	E111675-1D	E111675-1E	E111675-1F	35052-1319			
Constituent	Units							
Cyanide (Amenable to chlorination)	mg/l	<0.010 U						
Extract. Petroleum Hydrocarbons EPA 1664	mg/l			<1.5 U				
Fluoride	mg/l							
pH	ph un							
p-Chloro-m-cresol	µg/l		<5.0 U					
1,1,1-trichloroethane	µg/l							
1,1,2,2-tetrachloroethane	µg/l							
1,1,2-trichloroethane	µg/l							
1,1-dichloroethane	µg/l							
1,1-Dichloroethylene	µg/l							
o-Dichlorobenzene	µg/l							
1,2-dichloroethane	µg/l							
Propylene Dichloride	µg/l							
m-Dichlorobenzene	µg/l							
p-Dichlorobenzene	µg/l							
2-chloroethyl Vinyl Ether	µg/l							
Acrolein	µg/l							
Acrylonitrile	µg/l							
Benzene	µg/l							
Bromodichloromethane	µg/l							
Bromoform	µg/l							
Bromomethane	µg/l							
Carbon Tetrachloride	µg/l							
Chlorobenzene	µg/l							
Chloroethane	µg/l							
Chloroform	µg/l							
Chloromethane	µg/l							
Dibromochloromethane	µg/l							
Ethyl Benzene	µg/l							

Notes: 1. Printed on 12/11/01

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Notes: 1. Printed on 12/11/01

Page 1 of 1

Notes: 1. Printed on 12/11/01

Table 3
SUMMARY OF ANALYTICAL RESULTS
Willow Brook Pond: Stream Channel and Wetland - Dewatering Wastewater Compliance Monitoring

Page 1 of 2

	Location ID	WT-EW-14-002	WT-EW-14-002	WT-EW-14-002				
	Sample ID	2003028	2003028	2003028				
	Sample Date	12/06/2001	12/06/2001	12/06/2001				
	Sample Time	16:00	16:00	16:00				
	Laboratory	PREM	PREM	PREM				
	Lab. Number	E112245-1A	E112245-1B	E112245-1C				
Constituent	Units							
Date PCBs Analyzed	-	12/07/2001						
Date Metals Analyzed	-		12/10/2001					
Date Organics Analyzed	-			12/10/2001				
Date Physical Analyzed	-	12/07/2001						
Copper	mg/l		0.060 Y					
Lead	mg/l		<0.0040 U					
Zinc	mg/l		0.038 Y					
PCB 1016	µg/l	<0.45 U						
PCB 1221	µg/l	<0.45 U						
PCB 1232	µg/l	<0.45 U						
PCB 1242	µg/l	<0.45 U						
PCB 1248	µg/l	<0.45 U						
PCB 1254	µg/l	<0.45 U						
PCB 1260	µg/l	<0.45 U						
pH	ph un	8.4 Y						
1,1,1-trichloroethane	µg/l			<5.0 U				
1,1,2,2-tetrachloroethane	µg/l			<5.0 U				
1,1,2-trichloroethane	µg/l			<5.0 U				
1,1-dichloroethane	µg/l			<5.0 U				
1,1-Dichloroethylene	µg/l			<5.0 U				
o-Dichlorobenzene	µg/l			<5.0 U				
1,2-dichloroethane	µg/l			<5.0 U				
Propylene Dichloride	µg/l			<5.0 U				
m-Dichlorobenzene	µg/l			<5.0 U				
p-Dichlorobenzene	µg/l			<5.0 U				
2-chloroethyl Vinyl Ether	µg/l			<5.0 U				
Acrolein	µg/l			<20 U				
Acrylonitrile	µg/l			<20 U				
Benzene	µg/l			<5.0 U				

Notes: 1. Printed on 12/13/01



Page 2 of 2

Notes: 1. Printed on 12/13/01

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 7

Disposal Characterization Sampling Analytical Data

Table 1
SUMMARY OF SAMPLING AND ANALYTICAL INFORMATION
Willow Brook Pond: Disposal Characterization Sampling



Loureiro Engineering Associates, Inc.

Sample Information					Analysis Information							
Location ID	Sample ID	Sample Date	Sampled Interval (ft)	Sample Class	LEA Volatiles	Volatile Organics	Semivolatile Organics	Herbicides	Pesticides	PCBs	Metals	Miscellaneous Analyses
WT-DC-02-002	2002040	10/24/2001	2	SS						X		
WT-DC-02-003	2002041	10/24/2001	8	SS						X		
WT-DC-02-004	2002042	10/24/2001	1	SS						X		
WT-DC-02-005	2002043	10/24/2001	4	SS						x		
WT-DC-03-001	2002044	10/25/2001	2	SS						X		
WT-DC-03-002	2002045	10/25/2001	5	SS						X		
WT-DC-03-003	2002053	11/19/2001		CC						X		
WT-DC-03-004	2002054	11/19/2001		CC						X		
WT-DC-03-005	2002055	11/19/2001		CC						x		
WT-DC-04-008	2002028	10/11/2001	0.5	SS						X		
WT-DC-04-009	2002029	10/11/2001	0.5	SS						X		
WT-DC-04-010	2002030	10/11/2001	0.5	SS						x		
WT-DC-04-011	2002031	10/11/2001	0.5	SS						X		
WT-DC-04-012	2002032	10/15/2001	1	SS						X		
WT-DC-04-013	2002033	10/15/2001	1	SS						X		
WT-DC-04-014	2002034	10/15/2001	1	SS						X		
WT-DC-04-015	2002035	10/15/2001	1	SS						X		
WT-DC-04-016	2002036	10/15/2001	1	SS						X		
WT-DC-04-017	2002037	10/15/2001	1	SS						X		
WT-DC-04-018	2002056	11/19/2001		WIPE						X		
WT-DC-04-019	2002057	11/19/2001		WIPE						X		
WT-DC-04-020	2002058	11/19/2001		WIPE						X		
WT-DC-04-021	2002059	11/19/2001		WIPE						x		
WT-DC-04-022	2002060	11/19/2001		WIPE						X		
WT-DC-04-023	2002061	11/19/2001		WIPE						X		
WT-DC-04-024	2002062	11/19/2001		WIPE						X		
WT-DC-04-025	2002063	11/19/2001		WIPE						X		
WT-DC-04-026	2002064	11/19/2001		WIPE						X		
WT-DC-04-027	2002065	11/19/2001		WIPE						X		
WT-DC-04-028	2002066	11/19/2001		WIPE						X		
WT-DC-04-029	2002067	11/19/2001		WIPE						X		
WT-DC-04-030	2002068	11/19/2001		WIPE						X		
WT-DC-04-031	2002069	11/19/2001		WIPE						X		

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

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Sample Information

Analysis Information

[illegible]

Legend: x - mass, t - TCLP, s - SPLP, e - EPTOX, z - ZHE, d - Thermal Desorption, r - Charcoal Tube, a - SEM/AVS, f - filtered, nr - not received; Capitalized - at least one analyte in class detected

Page 2 of 2

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[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

**CONSENT ORDER SRD-130
UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION
QUARTERLY PROGRESS REPORT No. 2, DECEMBER 2001**

Attachment No. 8

Notice to DEP Requesting Schedule Extension

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney
A United Technologies Company

December 7, 2001

State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement & Remediation Division
79 Elm Street
Hartford, CT 06106-5127

Attn: Richard C. Hathaway, Jr., L.E.P.

RE: Consent Order SRD-130
Paragraph B.1.e.(2)– Schedule for Remedial Actions

Dear Mr. Hathaway:

In accordance with Paragraph B.8 of the above referenced Consent order, I hereby certify that:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statutes and any other applicable law.

Sincerely,

UNITED TECHNOLOGIES CORPORATION
PRATT & WHITNEY DIVISION

Lorin Sodell
Chief Manufacturing Engineer
Director, Facilities & Services

cc: Lauren Levine, UTC
Elsie Patton, DEP
Juan Perez, U.S. EPA
Denise Horan, Town of East Hartford
Melissa Toni, DEP
Cori Rose, ACOE



Loureiro Engineering Associates, Inc.

December 7, 2001

**State of Connecticut
Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement & Remediation Division
79 Elm Street
Hartford, CT 06106-5127**

Attn: Richard C. Hathaway, Jr., L.E.P.

**RE: Consent Order SRD-130
Paragraph B.1.e.(2)– Schedule for Remedial Actions**

Dear Mr. Hathaway:

We are herein providing notice that the approved schedule contained in Section 3.0 of the document entitled *Remedial Action Work Plan, United Technologies Corporation, Pratt & Whitney, Willow Brook and Willow Brook Pond, East Hartford, Connecticut* dated November 2000, revised May 2001 and July 2001 is being revised. A copy of the revised schedule is being submitted as an attachment to this letter for your review and approval.

The approved schedule provides for the completion of the construction activities by December 31, 2001. As a result of unforeseen conditions and expansion of the project scope, the construction activities, site restoration and the establishment of vegetation are anticipated to continue through June 2002. As a result of the extension of the overall construction period, the completion dates for post-remediation reports and Environmental Land Use Restrictions have also been extended to November 2002. It should be noted that the attached schedule contains assumptions including the ability to continue to work through the winter and that there are no increases in the overall project scope going forward. Should these assumptions prove incorrect, the overall impact to the project schedule will be evaluated and a subsequent modification, if necessary, will be submitted.

It is currently estimated that upon completion, approximately 31,600 cubic yards of contaminated soil and sediment will have been excavated and disposed of off the site. An increase of over 150 percent from the approximate 12,500 cubic yard estimate. The additional volume of contaminated soil results from two factors. First, greater than anticipated lateral and vertical extent of contamination in planned remediation areas has resulted in a significant expansion of excavation necessary to achieve remediation goals. Second, the decision to complete excavation beyond the limits required in Consent Order SRD-130 in select areas of the



DEP

December 7, 2001

Page 2 of 2

site where, due to physical constraints, the performance of future remediation would not be cost-effective or prudent.

In accordance with Paragraph B.8 of the above referenced Consent order, I hereby certify that:

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53-a-157b of the Connecticut General Statutes and any other applicable law.

If you should have any questions or comments, please contact me or Lauren Levine of United Technologies Corporation at (860) 728-6520.

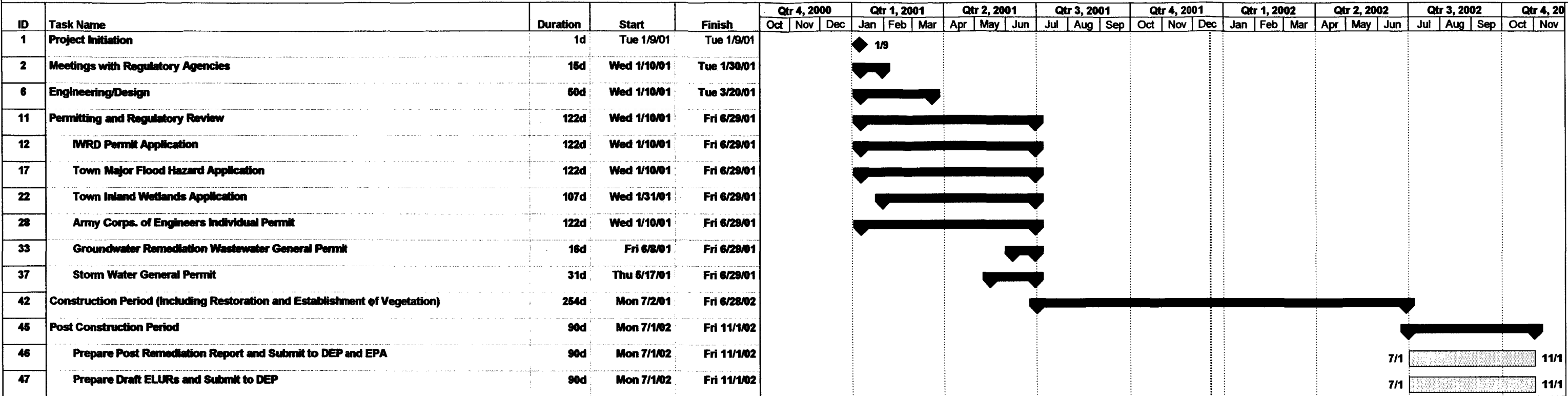
Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Brian A. Cutler, P.E., L.E.P.
Vice President

Attachment

Willow Brook/Willow Brook Pond
PCB Remediation Project
Project Schedule



Project: Willow Brook Pond Remediation
Date: 12/7/01

Task

Critical Task

Progress

Milestone

Summary

Rolled Up Task

Rolled Up Critical Task

Rolled Up Milestone

Rolled Up Progress

Schedule Contingent Upon Receipt of Approvals from Town of East Hartford P&Z and Wetlands, ACOE, and DEP within timeframes stipulated.

FIGURE 3-1